Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Permit Number: 091408

Please Read Application And Notes, If Any, Attached

PERMIT ISSUED

This is to certify that Skillful Re Llc /Project Resourc[illegible]Inc. / D[illegible]

has permission to Change of Use: From warehous[illegible]tail to b[illegible]ing all[illegible]with inte[illegible]renovations.

AT 58 Alder St CB[illegible]034 H002001

FEB - 5 2010

City of Portland

provided that the person or persons, fir[illegible] or co[illegible]on ac[illegible]ting this permit shall comply with all of the provisions of the Statutes of Ma[illegible]e and of the O[illegible]ces of the City of Portland regulating the construction, maintenance and use[illegible]f buildings and struc[illegible]ures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.	Notif[illegible]ation of[illegible]spection must be[illegible] give[illegible]nd writte[illegible]permissio[illegible]procured befo[illegible]this buil[illegible]g or pa[illegible]hereof is[illegible] lathe[illegible]or othe[illegible]ed-in. 24 HOU[illegible]NOTICE IS REQUIRED.	A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. CAPT. K. Fontaine

Health Dept. _____

Appeal Board _____

Other _____

Department Name

Director / Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
09-1408		034 H002001

Location of Construction:	Owner Name:	Owner Address:	Phone:
58 Alder St	Skillful Re Llc	Po Box 2	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Project Resources, Inc. / Dale Akele	PO Box 661 Yarmouth	2078311180
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Change of Use - Commercial	B-7

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Commercial / Skillfull Vending	Change of Use: From warehouse/retail to bowling alley with interior renovations.	$5,495.00	$540,000.00	1

FIRE DEPT: ☑ Approved ☐ Denied

*See Conditions

Signature:

INSPECTION:
Use Group: A-3 Type: 3B
Fully sprinkled + alarmed
IBC 2003

Signature:

Proposed Project Description:
Change of Use: From warehouse/retail to bowling alley with interior renovations.

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
gg	12/11/2009

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☑ Conditional Use PB	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☑ Site Plan #09-799000	☐ Approved	☐ Approved w/Conditions
Maj ☑ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 12/1/09	Date: 10/27/09	Date:

PERMIT ISSUED

FEB - 5 2010

City of Portland

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)
to schedule your inspections as agreed upon
Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

A Pre-construction Meeting will take place upon receipt of your building permit.

X **Footing/Building Location Inspection: Prior to pouring concrete or setting precast piers**

X **Framing/Rough Plumbing/Electrical: Prior to Any Insulating or drywalling**

X **Final/Certificate of Occupancy: Prior to any occupancy of the structure or use. NOTE: There is a $75.00 fee per inspection at this point.**

X **The final report of Special Inspections shall be submitted prior to the final inspection or the issuance of the Certificate of Occupancy**

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection.

If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.

CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED.

Signature of Applicant/Designee — Date: 2.5.10

Signature of Inspections Official — Date: 2.5.10

PERMIT ISSUED

FEB - 5 20[illegible]

City of Portland

CBL: 034 H002001 **Building Permit #:** 09-1408

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Date Applied For:	CBL:
09-1408	12/11/2009	034 H002001

Location of Construction:	Owner Name:	Owner Address:	Phone:
58 Alder St	Skillful Re Llc	Po Box 2	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Project Resources, Inc. / Dale Akele	PO Box 661 Yarmouth	(207) 831-1180
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Change of Use - Commercial	

Proposed Use:	Proposed Project Description:
Change of Use: From warehouse/retail to bowling alley with interior renovations.	Change of Use: From warehouse/retail to bowling alley with interior renovations.

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 12/11/2009

Note: **Ok to Issue:** ✔

1) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
2) Separate permits shall be required for any new signage.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 02/05/2010

Note: **Ok to Issue:** ☑

1) Separate Permits shall be required for any new signage.
2) Separate permits are required for any electrical, plumbing, sprinkler, fire alarm or HVAC or exhaust systems. Separate plans may need to be submitted for approval as a part of this process.
3) Permit approved based on the plans submitted and reviewed w/owner/contractor, with additional information as agreed on and as noted on plans.
4) New cafe, restaurant, lounge, bar or retail establishment where food or drink is sold and/or prepared shall meet the requirements of the City and State Food Codes
5) Approval of City license is subject to health inspections per the Food Code.
6) All special inspection reports must be submitted to this office for review within 48 hours of the inspection. A final special inspection report must be submitted prior to issuance of a certificate of occupancy. This report must demonstrate any deficiencies and corrective measures that were taken.
7) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approrval prior to work.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** Capt Keith Gautreau **Approval Date:** 12/15/2009

Note: **Ok to Issue:** ☑

1) The sprinkler system shall be installed in accordance with NFPA 13.
2) All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP and keyed alike, labeled "FIRE ALARM RECORDS".
3) System acceptance and commissioning must be co-ordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.
4) The Fire Department will require knox locking caps on all Fire Department Connections on the exterior of the building.
5) Application requires State Fire Marshal approval.
6) A separate Suppression System Permit is required.
7) All construction shall comply with NFPA 101
8) Installation of a Fire Alarm system requires a Knox Box to be installed per city crdinance

Location of Construction:	Owner Name:	Owner Address:	Phone:
58 Alder St	Skillful Re Llc	Po Box 2	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Project Resources, Inc. / Dale Akele	PO Box 661 Yarmouth	(207) 831-1180
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Change of Use - Commercial	

9) The fire alarm system shall comply with the City of Portland Standard for Signaling Systems for the Protection of Life and Property. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.

10 The Fire alarm and Sprinkler systems shall be reviewed by a licensed contractor[s] for code compliance. Compliance letters are required.

11 Occupancies with an occupant load of 100 persons or more require panic harware on all doors serving as a means of egress.

12 Emergency lights and exit signs are required. Emergency lights and exit signs are required to be labeled in relation to the panel and circuit.

13 Fire alarm system requires a Masterbox connection per city ordinance. Masterbox design and installation shall be as approved be City Electrical Division.

14 Fire extinguishers required. Installation per NFPA 10

15 Emergency lights are required to be tested at the electrical panel on the same circuit as the lighting for the area they serve.

16 Sprinkler protection shall be maintained. Where the system is to be shut down for maintenance or repair, the system shall be checked at the end of each day to insure the system has been placed back in service.

17 Fire Alarm system shall be maintained. If system is to be off line over 4 hours a fire watch shall be in place. Dispatch notification required 874-8576.

18 A separate Fire Alarm System Permit is required.

19 Fire department connection type and location shall be approved in writing by fire prevention bureau.

Comments:

12/11/2009-gg: received pdf, entered and with permit. /gg

12/11/2009-mes: e-mailed Shukria on whether Planning is ready to sign-off and allow inspections to issue the permit. I am passing the permit on to Fire to start the review HOLD THE PERMIT UNTIL PLANNING SIGNS OFF -

From: Philip DiPierro
To: Code Enforcement & Inspections
Date: 2/4/2010 3:20 PM
Subject: Bowl Portland, 58 Alder Street

Hi all, this project meets minimum DRC requirements for the issuance of the Building Permit. See HTE for sign off.

Thanks.

Phil

F09 1408

General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 58 Alder Street		
Total Square Footage of Proposed Structure/Area: 16,083 sf	Square Footage of Lot: 24,547 sf.	
Tax Assessor's Chart, Block & Lot — Chart# 34, Block# H, Lot# 2	Applicant *must be owner, Lessee or Buyer* — Name: Bowl Portland, LLC; Address: 161 Congress St.; City, State & Zip: Portland, ME 04101	Telephone: 207-712-1511
Lessee/DBA (If Applicable) — RECEIVED DEC 11 2009 Dept. of Building Inspections City of Portland Maine	Owner (if different from Applicant) — Name: Ross Y. Furman; Address: PO Box 2; City, State & Zip: Portland, ME 04112	Cost Of Work: $ 540,000; C of O Fee: $ 5,420; Total Fee: $ 5,420

Current legal use (i.e. single family): Assembly A-2/A-3 Warehouse/Retail Skillfull Vending

If vacant, what was the previous use?

Proposed Specific use: Bowling Alley

Is property part of a subdivision? ______ If yes, please name ______

Project description: Change of use from Warehouse/Retail to Bowling Alley. Interior Renovations

C of O 75.00
Bldg 5420.00
Total 5,495.00

Contractor's name: Owners Representative - Project Resources

Address: PO Box 661 253 Main Street

City, State & Zip: Yarmouth, ME 04096 Telephone:

Who should we contact when the permit is ready: Dale Akeley Telephone: 207-831-1180

Mailing address: Same

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

Received PDF

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature: [signature] Date: 12/10/09

This is not a permit; you may not commence ANY work until the permit is issue

From: "David Matero" <david@daymatero.com>
To: TMM@portlandmaine.gov
Date: 2/3/2010 4:33 PM
Subject: Bowl Portland

Tammy,

I spoke with Acudor and they forwarded this floor access door that would work for Bowl Portland. The size is not the same but it can be manufactured to our size.

I had the GC confirm existing conditions and this is what we have:

The current stair to the crawl space has 8 ½" risers and 9" treads. There are currently 12 risers and 11 treads. The stair is 3'□2" wide. If we maintain an opening of 8'□4" minimum we will have head height of 6'□8".

Acudor can manufacture an access door that is 3' wide x 8'□6" long. This size will allow the stair to remain and still maintain proper head height. The top will be recessed 1/8" to install carpet.

Please contact me as soon as possible. If this is sufficient the Owner will be anxious for the building permit. I will be on site Thursday morning meeting with public works for our site meeting requirement. I would be able to stop by if necessary.

Thank you for your help.

Sincerely,

David

David S. Matero, AIA, LEED AP

DayMatero studio

100 Front Street

Top Floor

Bath, ME 04530

david@daymatero.com

http://www.daymatero.com/

207.671.6820

Cc: Dale Akelely, Owner's Representative

Brucke Hilfrank, Zachau Construction

From: Chris Tyrpak [mailto:ctyrpak@acudor.com]
Sent: Wednesday, February 03, 2010 4:19 PM
To: 'david@daymatero.com'
Subject: Drawing

Please see attached

Christopher Tyrpak

Sales & Estimating

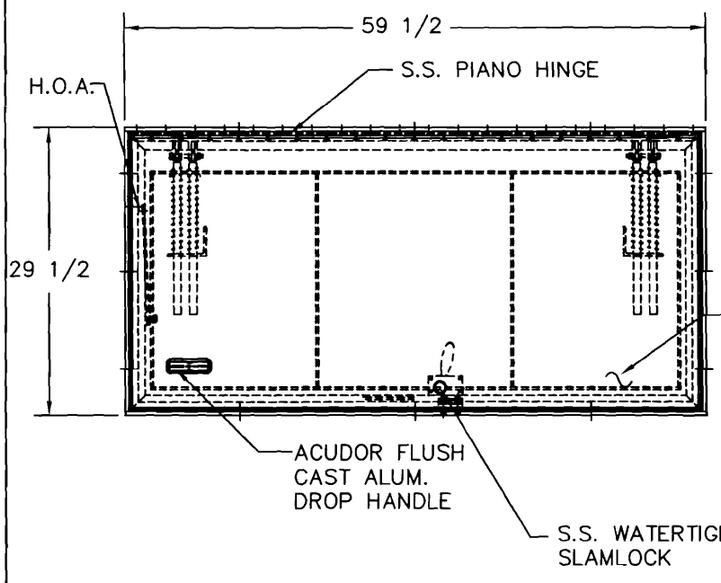
ACUDOR PRODUCTS, INC.

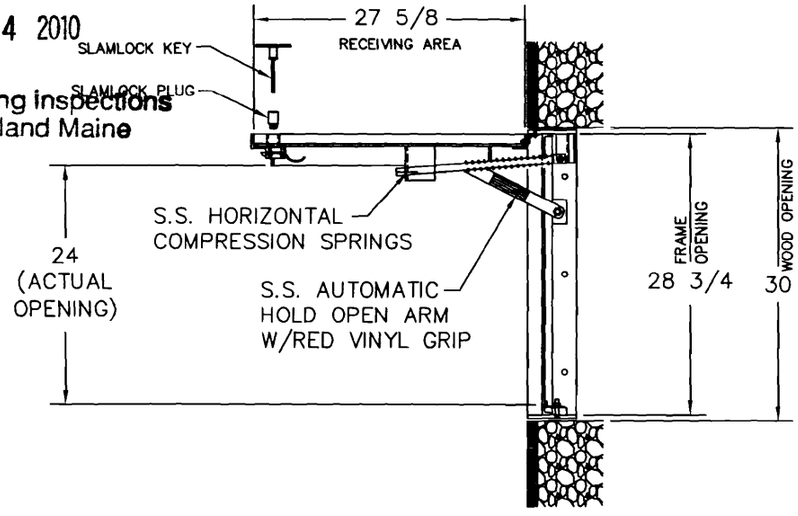
t 800-722-0501 ext. 106

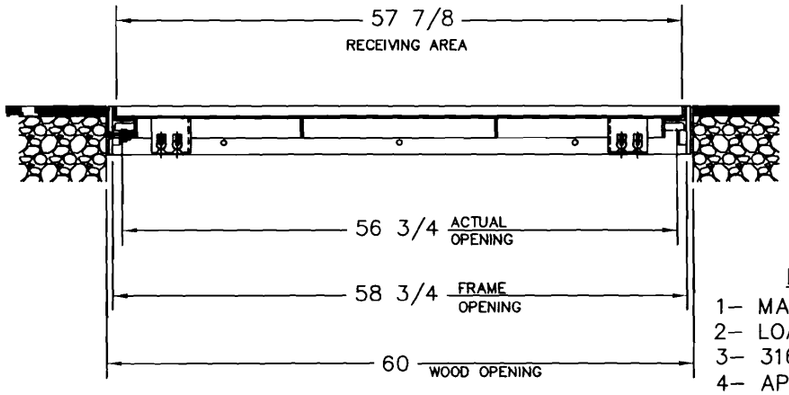
f 973-575-5160

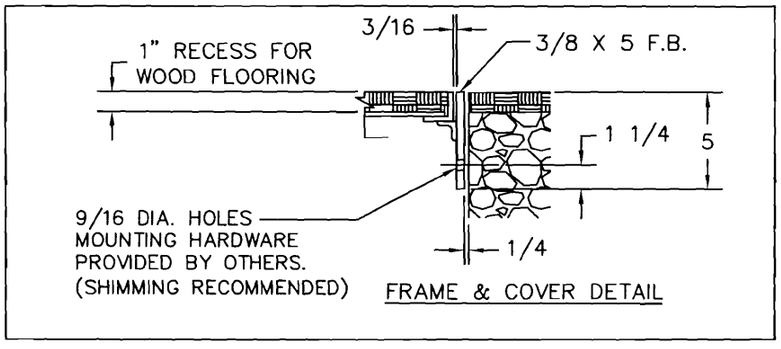
www.acudor.com

CC: bruce@zachauconstruction.com; eprojec1@maine.rr.com









NOTES:

1- MATERIAL: ALUMINUM
2- LOADING: 150 LBS. PER SQ. FT.
3- 316 STAINLESS STEEL NUTS & BOLTS
4- APPROXIMATE WEIGHT: 150 LBS.
5- SPRING KIT SUPPLIED SEPARATELY & TO BE ASSEMBLED IN FIELD AFTER HATCH INSTALLED.

ACUDOR PRODUCTS

FT-8040 28 3/4 X 58 3/4 ALUMINUM
W/. SPRINGS, & RETROFIT FRAME

DWN. BY:	SCALE:	QUOTE#	DATE:
LSS	1=12	82292	1/25/10
CHK. BY:	DWG. NO:	SHEET	REV:
	60877	1 OF 1	

From: "David Matero" <david@daymatero.com>
To: TMM@portlandmaine.gov
Date: 2/2/2010 4:40 PM
Subject: RE: Response to code enforcement comments

Tammy,

Attached is a cut sheet of the alternating tread stair for Bowl Portland. The stair company is Lapeyre Stair, and the GC has worked with them before. The cut sheet is a formula worked out from their website, and the floor to floor dimensions were measured on site.

Not approved. Keeping existing stair.

Please call with questions.

Thank you.

David

David S. Matero, AIA, LEED AP
DayMatero studio
100 Front Street
Top Floor
Bath, ME 04530
david@daymatero.com
http://www.daymatero.com/
207.671.6820

-----Original Message-----
From: Tammy Munson [mailto:TMM@portlandmaine.gov]
Sent: Tuesday, February 02, 2010 11:25 AM
To: David Matero
Subject: Re: Response to code enforcement comments

Hi David, can you provide me the spec's on the alternating stair? If they are on a web site you can refer to the page that gives the dimensions and forward that to me. As long as I can print a spec page, I'll put it in the file.

>>> "David Matero" <david@daymatero.com> 2/1/2010 8:31 PM >>>
Tammy,

Attached is our response to your comments regarding Bowl Portland. I will drop off a full size drawing of the reflected ceiling plan which is included in this file. Also included is the IECC 2003 compliance letter and a statement of special inspections.

Please contact me with questions.

Sincerely,

David Matero

David S. Matero, AIA, LEED AP

DayMatero studio

100 Front Street

Top Floor

Bath, ME 04530

<mailto:david@daymatero.com> david@daymatero.com

<http://www.daymatero.com/> http://www.daymatero.com/

207.671.6820

CC: bob@zachauconstruction.com; eprojec1@maine.rr.com; Bruce@zachauconstruction.com

DayMatero

100 Front Street
Top Floor
Bath, Maine US 04530
207.671.6819
daymatero.com

February 01, 2010

Ms. Tammy Munson
Code Enforcement Officer
City of Portland, Maine
389 Congress Street
Portland, ME 04101

Re: Bowl Portland – 58 Alder Street

Dear Tammy,

Per our discussion, please see our response that is reflected in the construction documents for Bowl Portland:

1. Sprinkler heads will be added above each lot line window.
2. The interior finish of surfaces shall be as follows
    a. Vertical exits and exit passageways shall be Class B
    b. Exit access corridors shall be Class B
    c. Rooms and enclosed spaces shall be Class C
3. Per IBC section 1209.3, access to mechanical appliances installed in under-floor area shall be in accordance with the International Mechanical Code which does allow a fixed ladder or alternating tread stair. We propose to enlarge the proposed floor hatch from 36" x 36" to 42" x 42" and provide an alternating tread stair.
4. The second floor shall have a limit of 9 occupants and is <u>not</u> a kitchen prep area
5. The head height at the stair to the second floor is 6'-8" or above.

6. Attached is a compliance report by ComCheck, IECC 2003, as requested. Please note that envelope, lighting, and mechanical passes. Drawing A7.1, Reflected Ceiling Plan and Lighting Plan is resubmitted and shall be considered part of the construction documents. A full size drawing will be forwarded to your attention.

7. Attached is a statement of special inspections.

Thank you for your help in the review of this project.

Sincerely,

David Matero, AIA, LEED AP

Cc: Charlie Mitchell, Justin Alfond, Dale Akeley, Bruce Hilfrank

Encl: ComCheck Report
Statement of Special Inspections
Drawing A7.1

COMcheck Software Version 3.7.0
Envelope Compliance Certificate

2003 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : Bowl Portland

Construction Site:
58 Alder Street
Portland, ME 04101

Owner/Agent:
Dale Akeley
Project Resources
PO Box 661
253 Main St
Yarmouth, ME 04096
207.846.8875
eprojec1@maine.rr.com

Designer/Contractor:
David Matero
DayMatero studio
100 Front Street
Top Floor
Bath, ME 04530
207.671.6820
david@daymatero.com

Section 2: General Information

Building Location (for weather data):	**Portland, Maine**
Climate Zone:	**15**
Heating Degree Days (base 65 degrees F):	**7378**
Cooling Degree Days (base 65 degrees F):	**268**
Vertical Glazing / Wall Area Pct.:	**4%**

Activity Type(s)	Floor Area
Gynmasium Playing Surface	7615
Corridor, Restroom, Support Area	180
Lobby - Other	700
Corridor, Restroom, Support Area	550
Kitchen	710
Corridor, Restroom, Support Area	735
Corridor, Restroom, Support Area	75
Restaurant	2500

Section 3: Requirements Checklist

Envelope PASSES: Design 44% better than code.

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Exterior Wall 1: Solid Concrete or Masonry <= 8", Furring: None Comments: Continuous except at brick piers	6460	---	15.2	0.058	0.075
Window 1: Metal Frame with Thermal Break:Double Pane with Low-E, Clear, SHGC 0.67 Comments: Includes storefront doors	232	---	---	0.340	0.526
Basement Wall 1: Solid Concrete or Masonry <= 8", Furring: None, Wall Ht 4.5, Depth B.G. 4.5 Comments: Closed cell spray insulation	675	---	12.0	0.075	0.100

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Air Leakage, Component Certification, and Vapor Retarder Requirements:

☐ 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.

- ☐ 2. Windows, doors, and skylights certified as meeting leakage requirements.
- ☐ 3. Component R-values & U-factors labeled as certified.
- ☐ 4. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- ☐ 5. Stair, elevator shaft vents, and other dampers integral to the building envelope are equipped with motorized dampers.
- ☐ 6. Cargo doors and loading dock doors are weather sealed.
- ☐ 7. Recessed lighting fixtures are: (i) Type IC rated and sealed or gasketed; or (ii) installed inside an appropriate air-tight assembly with a 0.5 inch clearance from combustible materials and with 3 inches clearance from insulation material.
- ☐ 8. Building entrance doors have a vestibule equipped with closing devices.
  Exceptions:

  Building entrances with revolving doors.

  Doors that open directly from a space less than 3000 sq. ft. in area.
- ☐ 9. Vapor retarder installed.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2003 IECC requirements in COM*check* Version 3.7.0 and to comply with the mandatory requirements in the Requirements Checklist.

David Matero, AIA Principal		2/1/10
Name - Title	Signature	Date

Day Matero studio

Project Notes:

General Contractor:
Zachau Construction
Bruce Hilfrank
115 US Route One
Freeport, ME 04032

COMcheck Software Version 3.7.0
Interior Lighting Compliance Certificate

2003 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : Bowl Portland

Construction Site:
58 Alder Street
Portland, ME 04101

Owner/Agent:
Dale Akeley
Project Resources
PO Box 661
253 Main St
Yarmouth, ME 04096
207.846.8875
eprojec1@maine.rr.com

Designer/Contractor:
David Matero
DayMatero studio
100 Front Street
Top Floor
Bath, ME 04530
207.671.6820
david@daymatero.com

Section 2: General Information

Building Use Description by: **Activity Type**

Activity Type(s)	Floor Area
Gynmasium Playing Surface	7615
Corridor, Restroom, Support Area	180
Lobby - Other	700
Corridor, Restroom, Support Area	550
Kitchen	710
Corridor, Restroom, Support Area	735
Corridor, Restroom, Support Area	75
Restaurant	2500

Section 3: Requirements Checklist

Interior Lighting:

☐ 1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
16059	15205	YES

☐ 2. Exit signs 5 Watts or less per sign.

Exterior Lighting:

☐ 3. Efficacy greater than 45 lumens/W.
Exceptions:

Specialized lighting highlighting features of historic buildings; signage; safety or security lighting; low-voltage landscape lighting.

Controls, Switching, and Wiring:

☐ 4. Independent controls for each space (switch/occupancy sensor).
Exceptions:

Areas designated as security or emergency areas that must be continuously illuminated.

Lighting in stairways or corridors that are elements of the means of egress.

☐ 5. Master switch at entry to hotel/motel guest room.

☐ 6. Individual dwelling units separately metered.

☐ 7. Each space provided with a manual control to provide uniform light reduction by at least 50%.

Exceptions:

Only one luminaire in space;

An occupant-sensing device controls the area;

The area is a corridor, storeroom, restroom, public lobby or guest room;

Areas that use less than 0.6 Watts/sq.ft.

☐ 8. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.
Exceptions:

Areas with only one luminaire, corridors, storerooms, restrooms, or public lobbies.

☐ 9. Photocell/astronomical time switch on exterior lights.
Exceptions:

Lighting intended for 24 hour use.

☐ 10. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
Exceptions:

Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Section 4: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2003 IECC, Chapter 8, requirements in COM*check* Version 3.7.0 and to comply with the mandatory requirements in the Requirements Checklist.

David Madero, Alt Principal — Name - Title

Day Madero Studio

Signature

2/1/10 — Date

COM*check* Software Version 3.7.0
Interior Lighting Application Worksheet

2003 IECC

Section 1: Allowed Lighting Power Calculation

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B x C)
Gynmasium Playing Surface	7615	1.4	10661
Corridor, Restroom, Support Area	180	0.9	162
Lobby - Other	700	1.3	910
Corridor, Restroom, Support Area	550	0.9	495
Kitchen	710	1.2	852
Corridor, Restroom, Support Area	735	0.9	662
Corridor, Restroom, Support Area	75	0.9	68
Restaurant	2500	0.9	2250
		Total Allowed Watts =	16059

Section 2: Proposed Lighting Power Calculation

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Gynmasium Playing Surface (7615 sq.ft.)				
Incandescent 4: Bowling Alley: A / Incandescent 50W	1	24	50	1200
Incandescent 5: A1 / Incandescent 75W	2	30	150	4500
Incandescent 6: H / Incandescent 45W	1	21	45	945
Linear Fluorescent 2: C / 48" T8 32W (Super T8) / Electronic	1	18	28	504
Incandescent 9: D2 / Incandescent 50W	2	12	100	1200
Corridor, Restroom, Support Area (180 sq.ft.)				
Incandescent 7: Vestibule: A / Incandescent 75W	1	4	75	300
Lobby - Other (700 sq.ft.)				
Incandescent 8: Entry Lobby: D / Incandescent 50W	1	19	50	950
Linear Fluorescent 3: F / 48" T8 32W (Super T8) / Electronic	2	1	70	70
Kitchen (710 sq.ft.)				
Linear Fluorescent 5: Kitchen and Alt Bar: K / 48" T8 32W (Super T8) / Electronic	4	7	110	770
Corridor, Restroom, Support Area (735 sq.ft.)				
Linear Fluorescent 6: Pinsetting mechanical: F / 48" T8 32W (Super T8) / Electronic	2	6	70	420
Linear Fluorescent 7: N / 48" T8 32W (Super T8) / Electronic	2	6	70	420
Corridor, Restroom, Support Area (75 sq.ft.)				
Linear Fluorescent 8: Stairs: F / 48" T8 32W (Super T8) / Electronic	2	2	70	140
Restaurant (2500 sq.ft.)				
Incandescent 10: Restaurant: D / Incandescent 50W	1	17	50	850
Incandescent 10: D1 / Incandescent 50W	1	29	50	1450
Incandescent 10: Bar Lighting: M / Incandescent 50W	1	12	50	600
Linear Fluorescent 9: Other / Premium efficiency	1	4	33	132
Corridor, Restroom, Support Area (550 sq.ft.)				
Incandescent 10: Incandescent 75W	1	6	75	450
Linear Fluorescent 10: 48" T8 32W (Super T8) / Electronic	1	8	38	304
			Total Proposed Watts =	15205

Section 3: Compliance Calculation

If the Total Allowed Watts minus the Total Proposed Watts is greater than or equal to zero, the building complies.

Total Allowed Watts =	16059
Total Proposed Watts =	15205
Project Compliance =	854

Interior Lighting PASSES: Design 5% better than code.

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Mechanical Compliance Certificate

2003 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : Bowl Portland

Construction Site:
58 Alder Street
Portland, ME 04101

Owner/Agent:
Dale Akeley
Project Resources
PO Box 661
253 Main St
Yarmouth, ME 04096
207.846.8875
eprojec1@maine.rr.com

Designer/Contractor:
David Matero
DayMatero studio
100 Front Street
Top Floor
Bath, ME 04530
207.671.6820
david@daymatero.com

Section 2: General Information

Building Location (for weather data):	**Portland, Maine**
Climate Zone:	**15**
Heating Degree Days (base 65 degrees F):	**7378**
Cooling Degree Days (base 65 degrees F):	**268**

Section 3: Mechanical Systems List

Quantity	System Type & Description
1	HVAC System 1: Heating: Central Furnace, Gas, Capacity 320 kBtu/h / Cooling: Rooftop Package Unit, Capacity 174 kBtu/h, Efficiency: 11.00 EER, Air-Cooled Condenser / Single Zone
1	HVAC System 2: Heating: Central Furnace, Gas, Capacity 192 kBtu/h / Cooling: Rooftop Package Unit, Capacity 122 kBtu/h, Efficiency: 11.50 EER, Air-Cooled Condenser / Single Zone
1	HVAC System 3: Heating: Unit Heater, Electric, Capacity 26 kBtu/h
1	Water Heater 1: Service Water Heater, Efficiency: 94.00 % Et

Section 4: Requirements Checklist

Requirements Specific To: HVAC System 1 :

- ☐ 1. Newly purchased heating equipment meets the heating efficiency requirements
- ☐ 2. Equipment minimum efficiency: Rooftop Package Unit: 9.5 EER
- ☐ 3. Integrated air economizer required

Requirements Specific To: HVAC System 2 :

- ☐ 1. Newly purchased heating equipment meets the heating efficiency requirements
- ☐ 2. Equipment minimum efficiency: Rooftop Package Unit: 10.1 EER
- ☐ 3. Integrated air economizer required

Requirements Specific To: HVAC System 3 :

None

Requirements Specific To: Water Heater 1 :

- ☐ 1. Heat traps in inlet/outlet fittings
- ☐ 2. 1/2-in. insulation on 8 ft of inlet/outlet piping if no integral heat traps
- ☐ 3. Gas Storage Water Heater efficiency: 80.0 % Et (140 SL, kBtu/h)

Generic Requirements: Must be met by all systems to which the requirement is applicable:

- ☐ 1. Load calculations per ASHRAE Fundamentals
- ☐ 2. Plant equipment and system capacity no greater than needed to meet loads
  - Exception: Standby equipment automatically off when primary system is operating
  - Exception: Multiple units controlled to sequence operation as a function of load
- ☐ 3. Minimum one temperature control device per system
- ☐ 4. Minimum one humidity control device per installed humidification/dehumidification system
- ☐ 5. Automatic Controls: Setback to 55 degrees F (heat) and 85 degrees F (cool); 7-day clock, 2-hour occupant override, 10-hour backup
  - Exception: Continuously operating zones
  - Exception: 2 kW demand or less, submit calculations
- ☐ 6. Automatic shut-off dampers on exhaust systems and supply systems with airflow >3,000 cfm
- ☐ 7. Outside-air source for ventilation; system capable of reducing OSA to required minimum
- ☐ 8. R-5 supply and return air duct insulation in unconditioned spaces R-8 supply and return air duct insulation outside the building R-8 insulation between ducts and the building exterior when ducts are part of a building assembly
  - Exception: Ducts located within equipment
  - Exception: Ducts with interior and exterior temperature difference not exceeding 15 degrees F.
- ☐ 9. Ducts sealed - longitudinal seams on rigid ducts; transverse seams on all ducts; UL 181A or 181B tapes and mastics
  - Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification
- ☐ 10. Mechanical fasteners and sealants used to connect ducts and air distribution equipment
- ☐ 11. Hot water pipe insulation: 1 in. for pipes <=1.5 in. and 2 in. for pipes >1.5 in. Chilled water/refrigerant/brine pipe insulation: 1 in. for pipes <=1.5 in. and 1.5 in. for pipes >1.5 in. Steam pipe insulation: 1.5 in. for pipes <=1.5 in. and 3 in. for pipes >1.5 in.
  - Exception: Piping within HVAC equipment.
  - Exception: Fluid temperatures between 55 and 105 degrees F.
  - Exception: Fluid not heated or cooled with renewable energy.
  - Exception: Runouts <4 ft in length.
- ☐ 12. Operation and maintenance manual provided to building owner
- ☐ 13. Balancing devices provided in accordance with IMC 603.15
- ☐ 14. Newly purchased service water heating equipment meets the efficiency requirements
- ☐ 15. Water heater temperature controls: 110 degrees F for dwelling units or 90 degrees F for other occupancies
- ☐ 16. Thermostatic controls have 5 degrees F deadband
  - Exception: Thermostats requiring manual changeover between heating and cooling
  - Exception: Special occupancy or special applications where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.
- ☐ 17. Stair and elevator shaft vents are equipped with motorized dampers

Section 5: Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2003 IECC requirements in COM*check* Version 3.7.0 and to comply with the mandatory requirements in the Requirements Checklist.

David Myers AIA Principal — Name - Title

Day Myers studio

Signature

2/1/10 — Date

COM*check* Software Version 3.7.0

Mechanical Requirements Description

2003 IECC

The following list provides more detailed descriptions of the requirements in Section 4 of the Mechanical Compliance Certificate.

Requirements Specific To: HVAC System 1 :

1. The specified heating equipment is covered by Federal minimum efficiency requirements. New equipment of this type can be assumed to meet or exceed ASHRAE 90.1 Code requirements for equipment efficiency.
2. The specified heating and/or cooling equipment is covered by ASHRAE 90.1 Code and must meet the following minimum efficiency: Rooftop Package Unit: 9.5 EER
3. An integrated air economizer is required for individual cooling systems over 65 kBtu/h in the selected project location. An integrated economizer allows simultaneous operation of outdoor-air and mechanical cooling.

Requirements Specific To: HVAC System 2 :

1. The specified heating equipment is covered by Federal minimum efficiency requirements. New equipment of this type can be assumed to meet or exceed ASHRAE 90.1 Code requirements for equipment efficiency.
2. The specified heating and/or cooling equipment is covered by ASHRAE 90.1 Code and must meet the following minimum efficiency: Rooftop Package Unit: 10.1 EER
3. An integrated air economizer is required for individual cooling systems over 65 kBtu/h in the selected project location. An integrated economizer allows simultaneous operation of outdoor-air and mechanical cooling.

Requirements Specific To: HVAC System 3 :

None

Requirements Specific To: Water Heater 1 :

1. Heat traps are required on noncirculating water heating systems on both inlet and outlet connections. Heat traps may be purchased or field-fabricated by creating a loop or inverted U-shaped arrangement on the inlet and outlet pipes.
2. Pipe insulation for the specified noncirculating service hot water system is required for all piping in the following categories: a) the first 8 ft of outlet piping from any constant-temperature, noncirculating storage system b) the inlet piping between the storage tank and a heat trap in a noncirculating storage system Pipe insulation must be at least 1/2 in. and have a conductivity no >0.28 Btu-in/(h-ft2-degrees F).
3. Service water heating equipment used solely for heating potable water, pool heaters, and hot water storage tanks must meet the following miniumum efficiency: Gas Storage Water Heater efficiency: 80.0 % Et (140 SL, kBtu/h)

Generic Requirements: Must be met by all systems to which the requirement is applicable:

1. Design heating and cooling loads for the building must be determined using procedures in the ASHRAE Handbook of Fundamentals or an approved equivalent calculation procedure.
2. All equipment and systems must be sized to be no greater than needed to meet calculated loads. A single piece of equipment providing both heating and cooling must satisfy this provision for one function with the capacity for the other function as small as possible, within available equipment options.
   - Exception: The equipment and/or system capacity may be greater than calculated loads for standby purposes. Standby equipment must be automatically controlled to be off when the primary equipment and/or system is operating.
   - Exception: Multiple units of the same equipment type whose combined capacities exceed the calculated load are allowed if they are provided with controls to sequence operation of the units as the load increases or decreases.
3. Each heating or cooling system serving a single zone must have its own temperature control device.
4. Each humidification system must have its own humidity control device.
5. The system or zone control must be a programmable thermostat or other automatic control meeting the following criteria: a) capable of setting back temperature to 55 degrees F during heating and setting up to 85 degrees F during cooling, b) capable of automatically setting back or shutting down systems during unoccupied hours using 7 different day schedules, c) have an accessible 2-hour occupant override, d) have a battery back-up capable of maintaining programmed settings for at least 10 hours without power.
   - Exception: A setback or shutoff control is not required on thermostats that control systems serving areas that operate continuously.
   - Exception: A setback or shutoff control is not required on systems with total energy demand of 2 kW (6,826 Btu/h) or less.
6. Outdoor-air supply systems with design airflow rates >3,000 cfm of outdoor air and all exhaust systems must have dampers that are automatically closed while the equipment is not operating.

7. The system must supply outside ventilation air as required by Chapter 4 of the International Mechanical Code. If the ventilation system is designed to supply outdoor-air quantities exceeding minimum required levels, the system must be capable of reducing outdoor-air flow to the minimum required levels.
8. Air ducts must be insulated to the following levels: a) Supply and return air ducts for conditioned air located in unconditioned spaces (spaces neither heated nor cooled) must be insulated with a minimum of R-5. Unconditioned spaces include attics, crawl spaces, unheated basements, and unheated garages. b) Supply and return air ducts and plenums must be insulated to a minimum of R-8 when located outside the building. c) When ducts are located within exterior components (e.g., floors or roofs), minimum R-8 insulation is required only between the duct and the building exterior.
   - Exception: Duct insulation is not required on ducts located within equipment.
   - Exception: Duct insulation is not required when the design temperature difference between the interior and exterior of the duct or plenum does not exceed 15 degrees F.
9. All joints, longitudinal and transverse seams, and connections in ductwork must be securely sealed using weldments; mechanical fasteners with seals, gaskets, or mastics; mesh and mastic sealing systems; or tapes. Tapes and mastics must be listed and labeled in accordance with UL 181A or UL 181B.
   - Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification.
10. Mechanical fasteners and seals, mastics, or gaskets must be used when connecting ducts to fans and other air distribution equipment, including multiple-zone terminal units.
11. All pipes serving space-conditioning systems must be insulated as follows: Hot water piping for heating systems: 1 in. for pipes <=1 1/2-in. nominal diameter, 2 in. for pipes >1 1/2-in. nominal diameter. Chilled water, refrigerant, and brine piping systems: 1 in. insulation for pipes <=1 1/2-in. nominal diameter, 1 1/2 in. insulation for pipes >1 1/2-in. nominal diameter. Steam piping: 1 1/2 in. insulation for pipes <=1 1/2-in. nominal diameter, 3 in. insulation for pipes >1 1/2-in. nominal diameter.
   - Exception: Pipe insulation is not required for factory-installed piping within HVAC equipment.
   - Exception: Pipe insulation is not required for piping that conveys fluids having a design operating temperature range between 55 degrees F and 105 degrees F.
   - Exception: Pipe insulation is not required for piping that conveys fluids that have not been heated or cooled through the use of fossil fuels or electric power.
   - Exception: Pipe insulation is not required for runout piping not exceeding 4 ft in length and 1 in. in diameter between the control valve and HVAC coil.
12. Operation and maintenance documentation must be provided to the owner that includes at least the following information: a) equipment capacity (input and output) and required maintenance actions b) equipment operation and maintenance manuals c) HVAC system control maintenance and calibration information, including wiring diagrams, schematics, and control sequence descriptions; desired or field-determined set points must be permanently recorded on control drawings, at control devices, or, for digital control systems, in programming comments d) complete narrative of how each system is intended to operate.
13. Each supply air outlet or diffuser and each zone terminal device (such as VAV or mixing box) must have its own balancing device. Acceptable balancing devices include adjustable dampers located within the ductwork, terminal devices, and supply air diffusers.
14. Service water heating equipment must meet minimum Federal efficiency requirements included in the National Appliance Energy Conservation Act and the Energy Policy Act of 1992, which meet or exceed ASHRAE 90.1 Code. New service water heating equipment can be assumed to meet these requirements.
15. Water-heating equipment must be provided with controls that allow the user to set the water temperature to 110 degrees F for dwelling units and 90 degrees F for other occupancies. Controls must limit output temperatures of lavatories in public facility restrooms to 110 degrees F.
16. Thermostats controlling both heating and cooling must be capable of maintaining a 5 degrees F deadband (a range of temperature where no heating or cooling is provided).
   - Exception: Deadband capability is not required if the thermostat does not have automatic changeover capability between heating and cooling.
   - Exception: Special occupancy or special applications where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.
17. Stair and elevator shaft vents must be equipped with motorized dampers capable of being automatically closed during normal building operation and interlocked to open as required by fire and smoke detection systems. All gravity outdoor air supply and exhaust hoods, vents, and ventilators must be equipped with motorized dampers that will automatically shut when the spaces served are not in use.
   - Exception: Gravity (non-motorized) dampers are acceptable in buildings less than three stories in height above grade.
   - Exception: Ventilation systems serving unconditioned spaces.

Statement of Special Inspections

Project: *Bowl Portland*

Location: *58 Alder Street, Portland, Maine*

Owner: *Bowl Portland, LLC*

Design Professional in Responsible Charge: *Carolyn C. Bird, PE*

This *Statement of Special Inspections* is submitted as a condition for permit issuance in accordance with the Special Inspection and Structural Testing requirements of the Building Code. It includes a schedule of Special Inspection services applicable to this project as well as the name of the Special Inspection Coordinator and the identity of other approved agencies to be retained for conducting these inspections and tests. This *Statement of Special Inspections* encompass the following disciplines:

☒ Structural ☐ Mechanical/Electrical/Plumbing
☐ Architectural ☐ Other: _____

The Special Inspection Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official and the Registered Design Professional in Responsible Charge. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official and the Registered Design Professional in Responsible Charge. The Special Inspection program does not relieve the Contractor of his or her responsibilities.

Interim reports shall be submitted to the Building Official and the Registered Design Professional in Responsible Charge.

A *Final Report of Special Inspections* documenting completion of all required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy.

Job site safety and means and methods of construction are solely the responsibility of the Contractor.

Interim Report Frequency: *As Required* or ☐ per attached schedule.

Prepared by:

Carolyn C. Bird, PE, Casco Bay Engineering
(type or print name)

Signature 1/25/10 Date

Design Professional Seal

Owner's Authorization:

Signature Date

Building Official's Acceptance:

Signature Date

Schedule of Inspection and Testing Agencies

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- ☐ Soils and Foundations
- ☒ Cast-in-Place Concrete
- ☐ Precast Concrete
- ☐ Masonry
- ☒ Structural Steel
- ☐ Cold-Formed Steel Framing
- ☐ Spray Fire Resistant Material
- ☒ Wood Construction
- ☐ Exterior Insulation and Finish System
- ☐ Mechanical & Electrical Systems
- ☐ Architectural Systems
- ☐ Special Cases

Special Inspection Agencies	Firm	Address, Telephone, e-mail
1. **Special Inspection Coordinator** **Carolyn C. Bird, P.E.**	*Casco Bay Engineering*	*424 Fore Street* *Portland, ME 04101* *207-842-2800* *carolynb@cascobayengineering.com*
2. Inspector Roger Domingo	*S.W. Cole /Elite Inspections*	*286 Portland Road* *Gray, ME 04039-9586* *207-657-2866* *rdomingo@swcole.com*
3. Inspector		
4. Testing Agency		
5. Testing Agency		
6. Other		

Note: The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

Quality Assurance Plan

Quality Assurance for Seismic Resistance

Seismic Design Category	*B*
Quality Assurance Plan Required (Y/N)	*N*

Description of seismic force resisting system and designated seismic systems:
Steel Concentric Braced Frame and Masonry shear walls transfer lateral forces to the foundation.

Quality Assurance for Wind Requirements

Basic Wind Speed (3 second gust)	*100 mph*
Wind Exposure Category	*C*
Quality Assurance Plan Required (Y/N)	*N*

Description of wind force resisting system and designated wind resisting components:
Steel Concentric Braced Frame and Masonry shear walls transfer lateral forces to the foundation.

Statement of Responsibility

Each contractor responsible for the construction or fabrication of a system or component designated above must submit a Statement of Responsibility.

Cast-in-Place Concrete

Item	Agency # (Qualif.)	Scope
1. Mix Design	*#2* *ACI-CCI* *ICC-RCSI*	*Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design.*
2. Material Certification		
3. Reinforcement Installation	*#1 or #2* *ACI-CCI* *ICC-RCSI*	*Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters*
4. Post-Tensioning Operations		*n/a*
5. Welding of Reinforcing		*n/a*
6. Anchor Rods	*#1 or #2*	*Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.*
7. Concrete Placement	*#2* *ACI-CCI* *ICC-RCSI*	*Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.*
8. Sampling and Testing of Concrete	*#2* *ACI-CFTT* *ACI-STT*	*Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064).*
9. Curing and Protection	*#2* *ACI-CCI* *ICC-RCSI*	*Inspect curing, cold weather protection and hot weather protection procedures.*
10. Other:		

Structural Steel

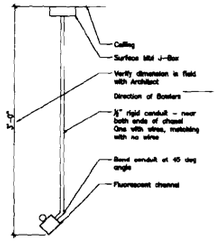
Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures ☐ Fabricator Exempt	*#2* *AWS/AISC-SSI* *ICC-SWSI*	*Review shop fabrication and quality control procedures.*
2. Material Certification	*#1 or #2* *AWS/AISC-SSI* *ICC-SWSI*	*Review certified mill test reports and identification markings on wide-flange shapes, high-strength bolts, nuts and welding electrodes*
3. Open Web Steel Joists		
4. Bolting	*#2* *AWS/AISC-SSI* *ICC-SWSI*	*Inspect installation and tightening of high-strength bolts. Verify that splines have separated from tension control bolts. Verify proper tightening sequence. Continuous inspection of bolts in slip-critical connections.*
5. Welding	*#2* *AWS-CWI* *ASNT*	*Visually inspect all welds. Inspect pre-heat, post-heat and surface preparation between passes. Verify size and length of fillet welds.*
6. Shear Connectors		*n/a*
7. Structural Details	*#1 or #2*	*Inspect steel frame for compliance with structural drawings, including bracing, member configuration and connection details.*
8. Metal Deck		*n/a*
9. Other:		

Wood Construction

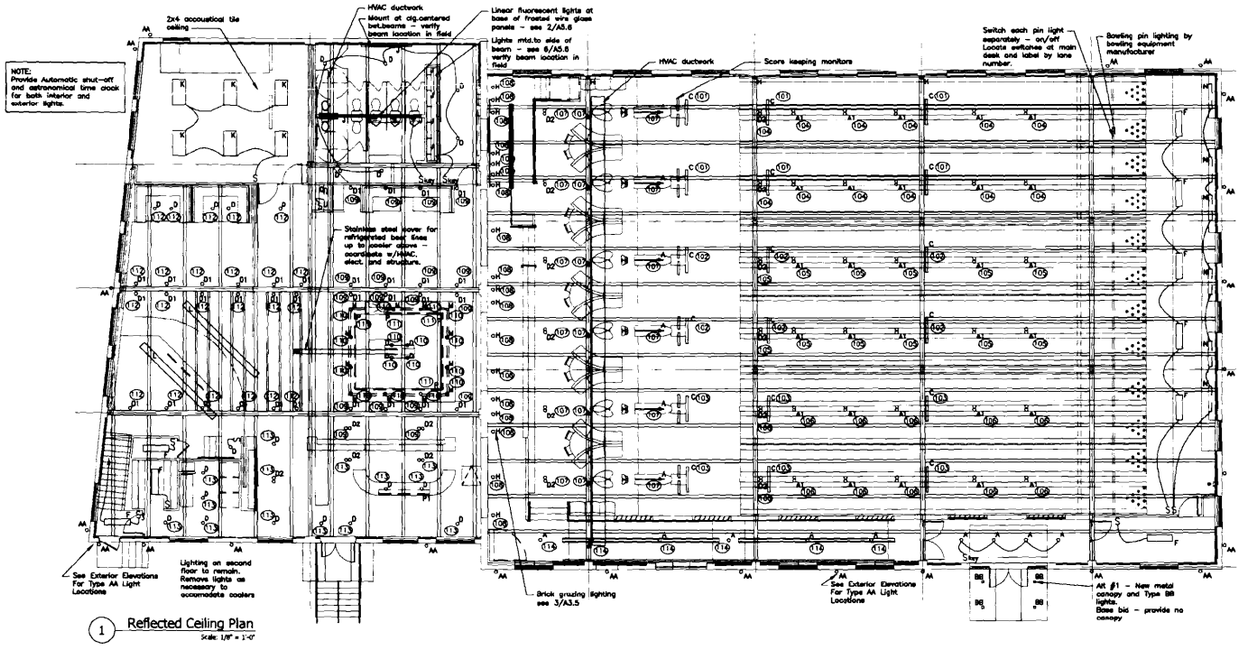
Item	Agency # (Qualif.)	Scope
1. Fabricator Certification/ Quality Control Procedures ☐ Fabricator Exempt		
2. Material Grading		*n/a*
3. Connections	*#1*	*Inspect wood connections.*
4. Framing and Details	*#1*	*Inspect wood framing compared to details.*
5. Diaphragms and Shearwalls		*n/a*
6. Prefabricated Wood Trusses		*n/a*
7. Permanent Truss Bracing		
8. Other:		

Switch Bank At Desk		
Load	Load Type	Dim or On/Off
101	Fluorescent	On/Off
102	Fluorescent	On/Off
103	Fluorescent	On/Off
104	Incandescent	Dim
105	Incandescent	Dim
106	Incandescent	Dim
107	Incandescent	Dim
108	Incandescent	Dim
113	Incandescent	Dim
114	Incandescent	Dim

Switch Bank Behind Bar		
Load	Load Type	Dim or On/Off
109	Fluorescent	On/Off
110	Fluorescent	On/Off
111	LED	Dim
112	Incandescent	Dim



3 Light Fixture Type C Dtl.
Scale: 1 - 1/2" = 1'-0"



1 Reflected Ceiling Plan
Scale: 1/8" = 1'-0"

2 Lighting Equipment Schedule

TYPE	DESCRIPTION	LAMP CODE	MANUFACTURER & CATALOG NUMBER	MAX. WATTS	/ft
A	Pendant (rigid conduit) mounted. Halogen, silver gray finish, adjustable die cast aluminum single lampholder system, rectangular die cast aluminum box, pendant length 36"	Philips 50PAR30S/HAL/FL25 130volt - NO SUBSTITUE ALLOWED	RAB Lighting R90 + R14-1 + B3	50	
A1	Pendant (rigid conduit) mounted. Halogen, silver gray finish, adjustable die cast aluminum two lampholder system, rectangular die cast aluminum box, pendant length 36"	Two - Philips 75PAR30S/HAL/FL25 130volt - NO SUBSTITUE ALLOWED	two - RAB Lighting R90 + One R14-3 + One R3	150	
B	**ALT.#6:** Surface mounted, medium base porcelain socket on metal raceway with screw in PAR20 narrow spot warm white LED lamp. One socket every 12 inches. Approx. 6'-6" per window, vertically mounted.	Eco-Story ES4"PAR20-30WW www.eco-story.com 207.774.9889	Wiremold Legrand 2400BC-FW + 2426FW 12"O.C.	5	/ft
C	Pendant (rigid conduit) mounted fluorescent, single lamp T8, fluorescent channel. Pendant length 30" Mount Channel at 45 deg.angle w/lamp facing up and away from bowlers - see Section 7/A3.3	Philips F32T8/TL830/Alto	Columbia Lighting CH4-132-EU	28	
D	Surface mounted on ceiling, metal junction box and keyless porcelain socket.	Philips 50PAR30S/HAL/FL25 130volt - NO SUBSTITUE ALLOWED	By Electrical Contractor	50	
D1	Surface mounted on side of beam, metal junction box and keyless porcelain socket.	Sylvania 60PAR16/HAL/NSP10 130volt - No Substitute Allowed	By Electrical Contractor	60	
D2	Surface mounted on ceiling, Halogen, silver gray finish, adjustable die cast aluminum two lampholder system, rectangular die cast aluminum box.	two - Philips 50PAR30S/HAL/FL25 130volt - NO SUBSTITUE ALLOWED	By Electrical Contractor	100	
E	Letter not used				
F	Pendant mounted. 120 volt, T8 fluorescent, 1 foot by 4 foot, wrap-around acrylic lens fixture, metal end caps.	(2) Philips F32T8/TL830/ALTO	Day-Brite Lighting CAN232-120 + Pendants	56	/ft
G	Surface mounted 120 volt incandescent, medium base porcelain sockets on metal raceway with screw in PAR16 narrow spot Halogen lamps. One socket every 12 inches.	Sylvania 50PAR16/HAL/SP10 - 130volt No Substitute Allowed	2400BC-FW + 2426FW 12"O.C.	50	/ft
G1	**ALT.#11:** Surface mounted 120 volt incandescent, medium base porcelain sockets on metal raceway with screw in PAR16 narrow spot Halogen lamps. One socket every 12 inches.	Sylvania 50PAR16/HAL/SP10 - 130volt No Substitute Allowed	2400BC-FW + 2426FW 12"O.C.	50	/ft
H	Surface mounted 120 volt incandescent, medium base porcelain socket on surface mounted metal junction box with screw in PAR 16 narrow spot Halogen lamp.	Sylvania 50PAR20/HAL/SP10 - 130volt	By Electrical Contractor	50	
I	Letter not used				
J	Recessed linear T8 fluorescent wall grazing system.	Philips F32T8/TL830/ALTO	Columbia Lighting CH4-132-EU	28	
K	Recessed in 2 x 4 grid ceiling, T8 fluorescent, 2 foot x 4 foot, 4 lamp, gasketed kitchen light, invert lens for easier cleaning.	(4) Philips F32T8/TL830/ALTO	Day-Brite Lighting 2DPWLG432-FSO1(INVERTED)-UNV-1/3-E8-2W-PAF	112	
L	Chain mounted theatrical lighting system		Chauvet Lighting		
M	Surface mounted, 120 volt, halogen incandescent, bar downlight	Sylvania 75PAR16/HAL/SP10 - 130volt No Substitute Allowed	keyless porcelain socket on junction box	75	
N	Surface mounted T8 fluorescent under shelf light.	Philips F32T8/TL830/ALTO	Columbia Lighting UC48-132-EU	38	
O	Letter not used				
P	Surface mounted under bar, LED, strip light. 3000K diodes 4"o.c., continuous clear ribbed lens. Remotely located 120v/24v Q-Tran driver required. Dimmable - use compatible dimmer.	3000K LED's included	Tolostar Lighting AV-MC4-LW 3000K-AVC	3	/ft
P1	**ALT.#8:** Surface mounted above display shelves, LED, strip light. 3000K diodes 4"o.c., continuous clear ribbed lens. Remotely located 120v/24v Q-Tran driver required. Dimmable - use compatible dimmer.	3000K LED's included	Tolostar Lighting AV-MC4-LW 3000K-AVC	3	/ft
Q	Surface mounted, 120 volt, xenon, 30 inch undercabinet task light. Control with dimmer.	3000K xenon included	Juno Lighting UPX430-WH	40	
AA	Exterior wall mounted, low voltage halogen, transformer located in junction box, ultra long life 50 watt MR16 narrow spot, 18,000 hour lamp.	Ushio FEP/FGF/Ultra Titan NO SUBSTITUTE ALLOWED	HK Lighting ZX16WM-BK 120/12	55	
BB	**ALT.#1 & #2:** Recessed in canopy, low voltage halogen, exterior downlight	Sylvania 50MR16/IR/NFL25/C	USA Illumination 9788 21 50TW	55	
	Alt.#13: Replace all 75 watt PAR30 lamps with dimmable, 24watt, warm white, 30degree beam, PAR38 LED lamps.	Ecosmart 9x3w-PAR38-E27-RS-30WW www.eco-story.com		27	

DayMatero
Architecture Lighting Design
100 Front Street
Top Floor
Bath Maine US 04530
207.671.4819
info@daymatero.com

Plan N

Consultants
Casco Bay Engineering – Structural Engineer
Casco Bay Engineering – Civil Engineer
TJM Consulting – Food Service
Urban Dwellings – Interior Design

Revisions
02.01.10 Issue for Permit

Bowl Portland
58 Alder Street Portland, Maine

DAVID S. MATERO No. 2705 STATE OF MAINE

Job Number: 09.017
Date: 01 Feb. 10
Scale: 1/8" = 1'-0"
Drawing Title:
RCP & Lighting Plan

A7.1
Issue For Permit

2003 INTERNATIONAL BUILDING CODE® PLAN REVIEW RECORD

INTERNATIONAL BUILDING CODE 2003

Plan Review # ____________
Date: ____________
Valuation: ____________
Fee: ____________

JURISDICTION: ______________________________
(City, County, Township, etc.)

BUILDING LOCATION: ______________________________
(Street address)

BUILDING DESCRIPTION: ______________________________

REVIEWED BY: ______________________________

Numerals indicated in parentheses are applicable code sections of the 2003 *International Building Code*. The plan review accomplished as indicated in this record is limited to those code sections specifically identified herein. This record references commonly applicable code sections. It does not reference all code provisions which may be applicable to specific buildings. This record is designed to be used only by those who are knowledgeable and capable of exercising competent judgement in evaluating construction documents for code compliance.

CORRECTION LIST

No.	DESCRIPTION (David Natero 207-671-6820)	Code Section
	58 Alder St.	
	Permit # 09-1408	
	Use - A-3 Type IIB } OK - use + construction } 1-9 have been addressed/corrected	
	Fully sprinkled + alarm	
①	Opening protection 704.8,12,14 - Exterior walls + 715	
②	Check section 803 - Interior wall + clng finishes.	
③	~~Smoke control system~~ - Stair to bsmnt	
④	Bathrooms, 2nd flr prep area - sink?	
⑤	Section 1018 - 2 means of egress from 2nd floor - ok per	Table 1014.1.
⑥	Check ceiling height in Stair - 6'-8"	
⑦	Need com check	
⑧	Special inspections - concrete, wood, steel	
⑨	Table - 4-1 Plumbing + (women's w.c. + drinking fountain)	
	433 / 216 each water station instead.	

07/04

CORRECTION LIST (cont'd.)

No.	DESCRIPTION	Code Section

NOTES: N.R. — Not required
N.A. — Not applicable

ADMINISTRATION (Chapter 1)

✓ Complete construction documents *(106.1, 106.2)*

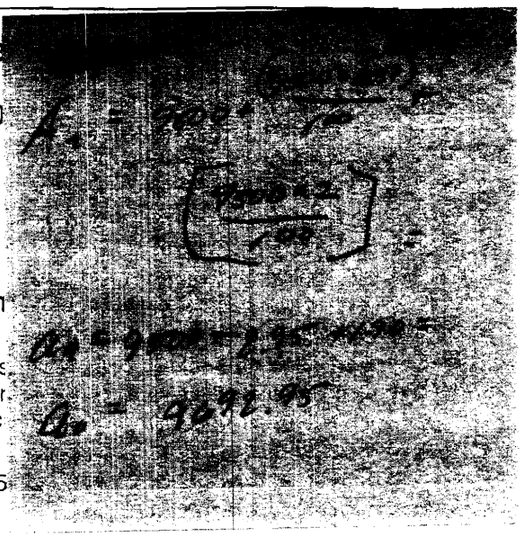
✓ Signed/sealed construction documents *(106.1,* State laws vary)

BUILDING PLANNING (Chapte

OCCUPANCY CLASSIFICATION (30

A-3 Single Occupancy *(302.1)* S

Mixed Occupancy *(302.3)* OK sprinkled



GENERAL BUILDING LIMITATIONS (Ch

Apply Case 1 to determine the allowable height and area and permitted types
single occupancy or nonseparated mixed occupancies. Apply Case 2 to deter
permitted types of construction for a building containing separated mixed occ

AREA MODIFICATIONS TO TABLE 5

% of Allowable tabular area, A_t *(Table 503)* 100%

% Increase for frontage, I_f *(506.2)* + 97.9%

% Increase for automatic sprinklers, I_s *(506.3)* + 200 %

Total percentage factor = 310 %

Conversion factor 310 ÷ 100% = 3.1 %
Total percentage factor ÷ 100%

Frontage (506.2)	80	175	80	168
	North	East	South	West

Total Frontage *(F)* 175 ft. Perimeter *(P)* 503 ft.

Width of open space *(W)* = 30'

% Frontage increase (I_f) = 97.9

(506.2) $I_f = 100\left(\frac{175}{503} - 0.25\right)\frac{30}{30}$ $I_f = 100\left[\frac{F}{P} - 0.25\right]\frac{W}{30}$

CASE 1 — SINGLE OCCUPANCY OR NONSEPARATED USES (302.3.1)

Using Table 503, identify the allowable height and area of the single occupancy or the most restrictive of the nonseparated mixed occupancies. Construction types that provide an allowable tabular area equal to or greater than the adjusted building area and allowable heights (as modified by Section 504) equal to or greater than the actual building height are permitted.

DETERMINE CONSTRUCTION TYPE

Actual building area 14,000 ft²

Adjusted building area 4516.12 ft²
actual building area ÷ conversion factor

Actual building height 29' feet 2 stories

Allowable building height 55' feet 2 stories

Permitted types of construction All but 5B

Type of construction assumed for review *(602.1.1)* 3B -

as called out by designer

CHECK ALLOWABLE AREA (506.4)

Allowable area per floor (A_a)

200% × 9500 = 19,000 ft²
conversion factor × tabular area *(Table 503)* =

Total floor area (all stories) 16,720 ft²

Allowable floor area (all stories)

19,000 × 2 = 38,000 ft²
Allowable area per floor (A_a) × number of stories (maximum 3) =

Compliance verified (Single Occ. or Nonsep.) OK

A-3 - 200% increase for sprinklers -

CASE 2 — MIXED OCCUPANCY SEPARATED USES (302.3.2)

Using Table 503, identify the allowable height and area of each of the separated uses within the building. Construction types that provide, for each story of the building, tabular areas (as modified by Section 506)which result in a sum of the ratios of 1.00 or less and allowable heights (as modified by Section 504) equal to or greater than the actual height of the use are permitted.

Story	Group	Actual floor area	Adjusted floor area*	Actual height	Allowable height
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories
		ft²	ft²	ft stories	ft stories

$$\sum \frac{\text{Adjusted floor area *}}{\text{Allow. tab. area, } A_t \text{ (Table 503)}} = \_\_\_ + \_\_\_ + \_\_\_ + \_\_\_ = \_\_\_ \leq 1.00$$

*Adjusted floor area = actual floor area ÷ conversion factor

CHECK ALLOWABLE AREA (506.4)

Allowable area per floor (A_a)

$$\frac{\text{conversion factor}}{\_\_\_} \times \frac{\text{tabular area (Table 503)}}{\_\_\_} = \_\_\_ \text{ ft}^2$$

Permitted types of construction _____

Total floor area (all stories) _____ ft²

Type of construction assumed for review (602.1.1) _____

Allowable floor area (all stories)

$$\frac{\text{Allowable area per floor } (A_a)}{\_\_\_} \times \frac{\text{number of stories (maximum 3)}}{\_\_\_} = \_\_\_ \text{ ft}^2$$

Compliance verified (Mixed Occ. Separated) _____

MEZZANINES (505)

N/A Area limitation (505.2)

Egress (505.3)

N/A Openness (505.4)

Equipment platforms (505.5)

UNLIMITED AREA BUILDINGS (507)

N/A Unsprinklered, one story (507.1)

Sprinklered, one story (507.2)

Two story (507.3)

Reduced open space (507.4)

Group A-3 buildings (507.5)

N/A High-hazard use groups (507.6)

Aircraft paint hangar (507.7)

Group E buildings (507.8)

Motion picture theaters (507.9)

SPECIAL PROVISIONS (508)

Special condition applicable (508.1)

Compliance verified

SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY (Chapter 4)

COVERED MALL BUILDINGS (402)

N/A Egress (402.4, 402.11)

Mall width (402.5)

Unlimited area (402.6)

Fire separations (402.7)

Automatic sprinkler system (402.8)

N/A Standpipe system (402.8.1)

Smoke control (402.9)

Kiosk requirements (402.10)

Emergency voice/alarm (402.12, 402.13)

Plastic signs (402.14)

Fire department access (402.15)

HIGH-RISE BUILDINGS (403)

N/A — Automatic sprinkler system *(403.2)*

____ Fire-resistance rating reduction *(403.3)*

____ Automatic fire detection *(403.5)*

____ Emergency voice/alarm systems *(403.6)*

____ Fire department communication *(403.7)*

____ Fire command center *(403.8)*

____ Elevators *(403.9)*

____ Standby power *(403.10)*

____ Emergency power *(403.11)*

✓ — Stairway doors *(403.12)*

____ Smokeproof exit *(403.13)*

ATRIUMS (404)

N/A — Atrium use *(404.2)*

____ Automatic sprinkler system *(404.3)*

____ Smoke control *(404.4)*

____ Enclosure *(404.5)*

____ Standby power *(404.6)*

✓ — Interior finish *(404.7)*

____ Travel distance *(404.8)*

OTHER SPECIAL USE AND OCCUPANCY

____ Underground structures *(405)*

____ Motor vehicle related occupancies *(406, 508)*

____ Group I-2 *(407)*

____ Group I-3 *(408)*

____ Motion picture projection rooms *(409)*

____ Stages and platforms *(410)*

____ Special amusement buildings *(411)*

____ Aircraft-related occupancies *(412)*

____ Combustible storage *(413)*

____ Hazardous materials *(307.9, 414)*

____ Groups H-1, H-2, H-3, H-4, and H-5 *(415)*

____ Application of flammable finishes *(416)*

____ Drying rooms *(417)*

____ Organic coatings manufacturing *(418)*

FIRE PROTECTION (Chapters 6, 7, 8, 9)

FIRE-RESISTANCE-RATED CONSTRUCTION (Tables 601 & 602 and Chapter 7)

Note: Entry in ☐ indicates required rating in hours. NC indicates noncombustible construction required.

3B — Construction classification *(602)*

COMBUSTIBILITY (602.2, 602.3, 602.4, 602.5, 603)

2 — Exterior walls (Bearing walls)

0 — Interior elements

0 — Roof

FIRE-RESISTANCE RATINGS AND FIRE TESTS (703)

____ Ratings / Combustibility *(703.2, 703.4)*

____ Alternative methods *(703.3, 718, 720, 721)*

BUILDING ELEMENTS (Table 601)

[2] ____ Structural frame *(714)*

[0] ____ Interior bearing walls

[0] ____ Interior nonbearing walls

[0] ____ Floor construction *(711)*

[0] ____ Roof construction *(711)*

EXTERIOR WALLS (507, Table 602, 704, 706.6)

	North	East	South	West
Fire separation distance	<5	+30	<5	<5
Bearing	[✓] 1	[✓] 0	[✓] 1	[✓] 1
Nonbearing	[1] 0	[0] 0	[✓] b	[✓] b

EXTERIOR WALLS (continued)

- ☐ ____ Opening protection *(704.8, 704.12, 704.14)*
- ☐ OK Vertical fire spread protection *(704.9, 704.10)*
- ☐ N/A Parapets *(704.11)* (Existing)

FIRE BARRIERS (706)

- ☑ OK Shaft enclosures *(706.3.1)* Shows 1 hour
- ☑ OK Exit enclosures *(706.3.2, 706.3.3)* 1 hour
- ☐ OK Horizontal exits *(706.3.4)*
- ☐ N/A Incidental use areas *(706.3.5)*
- ☐ N/A Mixed occupancy and fire area separations *(706.3.6, 706.3.7)*

SHAFTS (707)

- ☑ N/A Exceptions *(707.2)*
- ☑ OK Construction *(707.3 - 707.14)*

OTHER FIRE RESISTANT CONSTRUCTION

- ☑ OK Fire walls *(705)*
- ☐ N/A Fire partitions *(708)*
- ☐ ____ Smoke barriers *(709)*
- ____ Smoke partitions *(710)*
- ____ Penetrations *(712)*
- ____ Fire resistant joint systems *(713)*
- ____ Opening protectives *(715)*
- N/A Dampers *(716)*
- ____ Concealed spaces *(717)*
- ____ Thermal and sound-insulating materials *(719)*

INTERIOR FINISHES (Chapter 8)

- ____ Smoke development *(803.1)*
- ____ Flame spread *(803.1)*
- ____ Non-textile finish *(803.2)*
- ____ Floor finish *(804)*
- ____ Decorations and trim *(805)*

FIRE PROTECTION (Chapter 9)

AUTOMATIC SPRINKLER SYSTEMS (903) (Where required)

- Yes Assembly (A-1, A-2, A-3, A-4, A-5) *(903.2.1)*
- N/A Educational (E) *(903.2.2)*
- ____ Factory/Industrial (F-1) *(903.2.3)*
- ____ High-hazard (H-1, H-2, H-3, H-4, H-5) *(903.2.4)*
- ____ Institutional (I-1, I-2, I-3, I-4) *(407.5, 903.2.5)*
- ____ Mercantile (M) *(903.2.6)*
- ____ Residential (R) *(903.2.7)*
- ____ Storage/Repair garage (S-1) *(903.2.8)*
- ____ Parking garages *(903.2.9)*
- ____ Windowless story *(903.2.10.1)*
- ____ Rubbish and linen chutes *(903.2.10.2)*
- ____ Buildings over 55 ft. high *(903.2.10.3)*
- ____ Incidental use areas *(302.1.1)*
- ____ Additional required systems *(Table 903.2.13)*
- ____ International Fire Code *(IFC 903.2.13)*

AUTOMATIC SPRINKLER SYSTEMS* (903) (Design)

- N/A Shop drawings *(106.1.1.1)*
- Yes NFPA 13 system *(903.3.1.1)*
- N/A NFPA 13R system *(903.3.1.2)*
- ____ NFPA 13D system *(903.3.1.3)*
- ____ Quick-response and residential heads *(903.3.2)*
- ____ Actuation *(903.3.4)*
- ____ Water suply *(903.3.5)*
- ____ Hose connections *(903.3.6, 903.3.7)*
- ____ Sprinkler monitoring and alarms *(903.4, 907.13)*

* Also see Fire Code Sprinkler Plan Review Record

ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS (904)

- Installation *(904.3)*
- N/A — Wet-chemical systems *(904.5)*
- Dry-chemical systems *(904.6)*
- Foam systems *(904.7)*
- Carbon dioxide systems *(904.8)*
- Halon systems *(904.9)*
- Clean-agent systems *(904.10)*
- Commercial cooking systems *(904.2.1, 904.11)*

STANDPIPE SYSTEMS (905)

- Installation standards *(905.2)*
- Building height *(905.3.1)*
- Group A *(905.3.2)*
- Covered malls *(905.3.3)*
- Stages *(905.3.4)*
- Underground buildings *(905.3.5)*
- Helistops/heliports *(905.3.6)*
- Hose connections and locations *(905.1, 905.4, 905.5, 905.6)*
- Cabinets *(905.7)*
- Dry standpipes *(905.8)*
- Valve supervision *(905.9)*

PORTABLE FIRE EXTINGUISHERS (906)

- NFPA — Required locations - IFC *(906.1)*

FIRE ALARM AND DETECTION SYSTEMS (907) (Where required)

- Construction documents *(907.1.1)*
- Yes — Assembly (A-1, A-2, A-3, A-4, A-5) *(907.2.1)*
- N/A — Business (B) *(907.2.2)*
- Educational (E) *(907.2.3)*
- Factory (F-1, F-2) *(907.2.4)*
- High-hazard (H-1, H-2, H-3, H-4, H-5) *(907.2.5)*
- Institutional (I-1, I-2, I-3, I-4) *(907.2.6)*
- Mercantile (M) *(907.2.7)*
- Residential (R-1, R-2) *(907.2.8, 907.2.9)*
- Single/multiple station smoke alarms *(907.2.10)*
- N/A — High rise buildings *(907.2.12)*
- Atriums *(907.2.13)*
- Other buildings/areas *(907.2.11, 907.2.14 - 907.2.23)*

FIRE ALARM AND DETECTION SYSTEMS (907) (Design)

- Residential smoke alarm power source *(907.2.10.2)*
- Residential smoke alarm interconnection *(907.2.10.3)*
- Location/Power supply/Wiring *(907.3 - 907.5)*
- Activation/Presignal/Zones *(907.6 - 907.8)*
- Alarm notification appliances *(907.9)*
- Detectors *(907.10 - 907.12)*
- Monitoring *(907.14)*

EMERGENCY ALARM SYSTEMS (908)

- Detection system applicable *(908.1 - 908.6)*

SMOKE CONTROL SYSTEMS (909) Atriums, underground buildings

- ? — Where required *(402.9, 404.4, 405.5, *408.8, 410.3.7.2, 1019.1.8, 1024.6.2.1)* windowless buildings Stages,
- Design requirements *(909.1 - 909.4)*
- Smoke barriers *(909.5)*
- Pressurization method *(909.6)*
- Airflow method *(909.7)*
- Exhaust method *(909.8)*
- Equipment/Power *(909.10, 909.11)*
- Detection and control *(909.12 - 909.18)*
- Smokeproof enclosures *(909.20)*
- Underground buildings *(909.21)*

SMOKE AND HEAT VENTS (910)

- N/A — Requirements *(910.1 - 910.3)*
- Mechanical alternative *(910.4)*

FIRE COMMAND CENTER (911)

- N/A — Features *(911.1)*

OCCUPANT NEEDS (Chapters 10, 11, 12)

MEANS OF EGRESS (Chapter 10)

OCCUPANT LOAD *(1004.1.2 and Table 1004.1.2)*

Location	Floor Area	÷ Sq.ft./ person	= Occt. load	Other occt. loads	Total
1st floor	14,000	/ [redacted]			
Lanes - (12 × 5)					60
See ASK.05 for calc.					
				Total-	433

CAPACITY OF EGRESS COMPONENTS *(1005.1 and Table 1005.1)*

Egress width (inch/occupant)

Stairways [redacted] 0.2

Other egress components 0.15

CAPACITY

Location	Stairways	Other egress components
	"48"	

NUMBER OF EXITS *(1018.1, 1018.2)*

Location	Required	Shown
1st flr	2	3
2nd flr	2	1

1018 - 2 Stairs Req. for 2nd floor

MEANS OF EGRESS (continued)

GENERAL MEANS OF EGRESS

OK — Design requirements *(1003.2 - 1003.7)*

Means of egress illumination *(1006)*

Exit signs *(1011)*

OK — Accessible means of egress *(1007)*

OK — Means of egress doors *(1008.1-1008.1.2)*

Special doors/Gates/Turnstiles *(1008.1.3, 1008.2, 1008.3)*

Door landings/Thresholds/Arrangement *(1008.1.4 -1008.1.7)*

Door hardware *(1008.1.8, 1008.1.9)*

Stairways *(1009)*

Handrails *(1009.11)*

Roof access *(1009.12)*

Ramps *(1010)*

Guards *(1012)*

EXIT ACCESS

OK — Door number and arrangement *(1013.2, 1014.1, 1014.2)*

250' — Exit access travel distance *(1013.3, 1015.1)*

N/A — Aisles *(1013.4)*

N/A — Egress balconies *(1013.5, 1015.3)*

Corridors *(1016)*

Air movement in corridors *(1016.4)*

EXITS / EXIT DISCHARGE

OK — Exits/Exit doors *(1017, 1018)*

Interior exit stairways *(1019)*

Exit passageways *(1020)*

Horizontal exits *(1021)*

Exterior exit ramps/stairways *(1022)*

Exit discharge *(1023)*

OTHER MEANS OF EGRESS

Miscellaneous egress requirements *(1014.3 - 1014.6)*

Bleachers *(1024.1.1)*

Assembly exits & egress *(1024.2 - 1024.5)*

Assembly aisles & features *(1024.6 -1024.15)*

Emergency escape and rescue *(1025)*

ACCESSIBILITY* (Chapter 11)

Scoping requirements *(1103)*

Accessible route *(1104)*

Accessible entrances *(1105)*

Parking and passenger loading *(1106)*

Dwelling units and sleeping units *(1107)*

Special occupancies *(1108)*

Features and facilities *(1109)*

Signage *(1110)*

*Also see Accessibility Plan Review Record

INTERIOR ENVIRONMENT (Chapter 12)

✓	Ventilation openings *(1203)*	N/A	Sound transmission *(1207)*
✓	Temperature control *(1204)*	OK	Interior space dimensions *(1208)*
✓	Lighting *(1205)*	N/A	Access to unoccupied spaces *(1209)*
N/A	Yards or courts *(1206)*	OK	Surrounding materials *(1210, 2509)*

BUILDING ENVELOPE (Chapters 13*, 14, 15)

*See Energy Conservation Code Plan Review Record

EXTERIOR WALLS (Chapter 14) Com-check

_____	Performance requirements *(1403)*	_____	Exterior wall coverings/MCM's *(1405, 1407)*
_____	Materials *(1404)*	_____	Combustible material restrictions *(1406)*

ROOF ASSEMBLIES AND ROOFTOP STRUCTURES (Chapter 15)

_____	Weather protection *(1503)*	_____	Materials *(1506)*
_____	Flashing *(1503.2, 1507.2.9, 1507.3.9, 1507.5.6, 1507.7.6, 1507.8.7, 1507.9.8)*	_____	Roof coverings *(1507)*
		_____	Roof insulation *(1508)*
_____	Performance requirements *(1504)*	_____	Rooftop structures *(1509)*
_____	Fire classification *(1505)*	_____	Reroofing *(1510)*

STRUCTURAL SYSTEMS (Chapters 16, 17, 18)

STRUCTURAL DESIGN (Chapter 16) Certificate of design

STRUCTURAL DESIGN CALCULATIONS

_____ Submitted for all structural members *(106.1, 106.1.1)*

DESIGN LOADS ON CONSTRUCTION DOCUMENTS (1603)

Uniformly distributed floor live loads *(1603.1.1, 1607)*

Floor Area Use	Loads Shown
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

_____ Live load reduction *(1603.1.1, 1607.9, 1607.10)*

_____ Roof live loads *(1603.1.2, 1607.11)*

Roof snow loads *(1603.1.3, 1608)*

_____ Ground snow load, P_g *(1608.2)*

_____ If P_g > 10 psf, flat-roof snow load, P_f *(1608.3)*

_____ If P_g > 10 psf, snow exposure factor, C_e *(Table 1608.3.1)*

_____ If P_g > 10 psf, snow load importance factor, I_s *(Table 1604.5)*

_____ Roof thermal factor, C_t *(Table 1608.3.2)*

_____ Sloped roof snowload, P_s *(1608.4)*

DESIGN LOADS (continued)

Wind loads *(1603.1.4, 1609)*

_____ Design option utilized *(1609.1.1, 1609.6)*

_____ Basic wind speed *(1609.3)*

_____ Building category and wind importance factor, I_w *(Table 1604.5, 1609.5)*

_____ Wind exposure category *(1609.4)*

_____ Internal pressure coefficient *(ASCE 7)*

_____ Component and cladding pressures *(1609.1.1, 1609.6.2.2)*

_____ Main force wind pressures *(1609.1.1, 1609.6.2.1)*

Earthquake design data *(1603.1.5, 1614 - 1623)*

_____ Design option utilized *(1614.1)*

_____ Seismic use group ("Category") *(Table 1604.5, 1616.2)*

_____ Spectral response coefficients, S_{DS} & S_{D1} *(1615.1)*

_____ Site class *(1615.1.5)*

_____ Seismic design category *(1616.3)*

_____ Basic seismic-force-resisting system *(Table 1617.6.2)*

_____ Response modification coefficient, R, and deflection amplification factor, C_d *(Table 1617.6.2)*

_____ Analysis procedure *(1616.6, 1617.5)*

_____ Design base shear *(1617.4, 1617.5.1)*

Flood loads *(1603.1.6, 1612)*

_____ Flood hazard area *(1612.3)*

_____ Elevation of structure

Other loads

_____ Concentrated loads *(1607.4)*

_____ Partition loads *(1607.5)*

_____ Impact loads *(1607.8)*

_____ Misc. loads (*Table 1607.6, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)*

QUALITY ASSURANCE (Chapter 17)

_____ Approvals/Research report(s)*(1703, 1703.4.2)* Report No._____

_____ Owner's special inspection program specified *(1704.1.1)*

N/A Prefabricated items *(1704.2)*

N/A Steel construction *(1704.3)*

? Concrete construction *(1704.4)*

N/A Masonry construction *(1704.5)*

_____ Wood construction *(1704.6)*

N/A Prepared fill and foundations *(1704.7, 1704.8, 1704.9)*

_____ Wall panels and veneers/EIFS *(1704.10, 1704.12)*

_____ Sprayed fire-resistant materials *(1704.11)*

_____ Quality assurance plan - Seismic/Wind *(1705, 1706)*

_____ Seismic resistance *(1707)*

_____ Structural testing/Observations (seismic) *(1708, 1709)*

_____ Testing (other) *(1710 - 1715)*

SOILS AND FOUNDATIONS (Chapter 18)

existing Soils investigations/Reports *(1802.1, 1802.6)*

_____ Soil classification *(1802.3)*

_____ Excavation, grading and fill *(1803)*

_____ Load-bearing values *(1804)*

_____ Footings and foundations *(1805)*

_____ Retaining walls *(1806)*

_____ Dampproofing and waterproofing *(1807)*

_____ Foundations (other types) *(1808 - 1812)*

STRUCTURAL MATERIALS (Chapters 19, 21, 22, 23)

CONCRETE (Chapter 19)

N/A

Plain and reinforced concrete design/construction standard specified *(1901.2, 1908)*

Construction documents *(1901.4)*

Minimum concrete strength *(Table 1904.2.2[2])*

Hot weather and cold weather curing specified *(1905.12, 1905.13)*

Seismic design *(1910)*

Slab provisions *(1911)*

MASONRY (Chapter 21)

N/A

Design method, construction standard specified *(2101.2)*

Construction documents *(2101.3)*

Construction materials *(2103)*

Mortar type *(2103.7)*

Cold weather and hot weather construction specified *(2104.3, 2104.4)*

Seismic design *(2106)*

Glass unit masonry *(2110)*

Fireplaces/Heaters/Chimneys *(2111, 2112, 2113)*

STEEL (Chapter 22)

N/A

Structural steel design/construction standard specified *(2205)*

Open-web steel joist design/construction standard specified *(2206)*

Steel cable structures *(2207)*

Steel storage racks *(2208)*

Cold-formed steel design/construction standard specified *(2209)*

Light framed cold-formed steel design/construction standard specified *(2210)*

Wind/seismic design of light-framed, cold-formed steel shear walls *(2211)*

WOOD (Chapter 23)

_____ Design method option used *(2301.2)*

MATERIAL STANDARDS / CONSTRUCTION REQUIREMENTS (2303 - 2306)

_____ Lumber *(2303.1.1)*

_____ Wood I-joists *(2303.1.2)*

_____ Glue laminated timbers *(2303.1.3)*

_____ Wood structural panels *(2303.1.4, 2304.6, 2304.7)*

_____ Fiber-, hard-, & particle-, boards *(2303.1.5 - 2303.1.7)*

_____ Decay and termite protection *(2303.1.8, 2304.11)*

_____ Structural composite lumber *(2303.1.9)*

_____ Fire-retardant-treated wood *(2303.2)*

_____ Hardwood plywood *(2303.3)*

_____ Metal plate connected trusses *(2303.4)*

_____ Joist hangers and connectors *(2303.5)*

_____ Fasteners and fastening *(2303.6, 2304.9, Table 2304.9.1)*

_____ Heavy timber construction *(2304.10)*

_____ Shear walls and diaphragms *(2305, 2306)*

CONVENTIONAL LIGHT-FRAME CONSTRUCTION (2308)

_____ Limitations satisfied *(2308.2)*

_____ Wind/Seismic requirements *(2308.2.1, 2308.2.2, 2308.11, 2308.12)*

_____ Braced walls *(2308.3, 2308.9.3)*

_____ Foundation anchorage *(2308.3.3, 2308.6)*

OK Floor joists *(Tables 2308.8[1], 2308.8[2])*

_____ Wall studs *(Table 2308.9.1)*

_____ Girders *(Tables 2308.9.5, 2308.9.6)*

_____ Ceiling joists *(Tables 2308.10.2[1], 2308.10.2[2])*

_____ Roof rafters *(Tables 2308.10.3.[1] - 2308.10.3[6])*

_____ Roof uplift *(2308.10.1)*

NONSTRUCTURAL MATERIALS (Chapters 24, 25, 26)

GLASS AND GLAZING (Chapter 24)

_____ Sloped glazing and skylights *(2405)*

_____ Safety glazing *(2406, 2407, 2408, 2409)*

GYPSUM BOARD AND PLASTER (Chapter 25)

_____ Gypsum board materials *(2506, Table 2506.2)*

_____ Plaster *(2507, 2508, 2510 - 2513)*

PLASTIC (Chapter 26)

FOAM PLASTIC INSULATION (2603)

_____ Labeling *(2603.2, 2603.5.6)*

_____ Surface-burning characteristics *(2603.3, 2603.5.4)*

_____ Thermal barrier *(2603.4)*

_____ Exterior walls/Roofs *(2603.5, 2603.6)*

_____ Special approval *(2603.8)*

MISCELLANEOUS PLASTICS

_____ Interior finish and trim *(2604)*

_____ Plastic veneer *(2605)*

_____ Light-transmitting plastics *(2606 - 2611)*

BUILDING SERVICES* (Chapters 27, 28, 29, 30)

ELEVATORS AND CONVEYING SYSTEMS (Chapter 30)

_____ Construction standard specified *(3001.2)*

_____ Hoistway enclosures *(3002)*

_____ Opening protectives *(3002.1.1)*

_____ Emergency operations *(3003)*

_____ Hoistway venting *(3004)*

_____ Conveying systems *(3005)*

_____ Machine rooms *(3006)*

* Also see Electrical (Ch.27), Mechanical (Ch.28) and Plumbing (Ch.29) Plan Review Records

SPECIAL DEVICES AND CONDITIONS (Chapters 31, 34)

SPECIAL CONSTRUCTION (Chapter 31)

N/A Membrane structures *(3102)*

_____ Awnings and canopies/Marquees *(3105, 3106)*

_____ Signs *(3107)*

_____ Radio and television towers *(3108)*

_____ Swimming pool enclosures *(3109)*

PEDESTRIAN WALKWAYS AND TUNNELS (3104)

_____ Construction and use *(3104.3, 3104.4)*

_____ Separation *(3104.5, 3104.10)*

_____ Public way *(3104.6)*

_____ Egress/Ventilation *(3104.7 - 3104.9, 3104.11)*

EXISTING STRUCTURES (Chapter 34)

_____ Additions, alterations, repairs *(3403)*

_____ Fire escapes *(3404)*

_____ Change of occupancy *(3406)*

_____ Accessibility *(3409)*

_____ Compliance alternatives *(3410)*

BUILDING EVALUATION SUMMARY *(Table 3410.7)*

Existing occupancy _____ Proposed occupancy _____
Year building was constructed _____ Number of stories _____ Height in feet _____
Type of construction _____ Area per floor _____
Percentage of frontage _____% Corridor wall rating _____
Completely suppressed: Yes _____ No _____ Required door closers: _____ Yes _____ No _____
Compartmentation: Yes _____ No _____
Fireresistance rating of vertical opening enclosures _____
Type of HVAC system _____, serving number of floors _____
Automatic fire detection: Yes _____ No _____, type and location _____
Fire alarm system: Yes _____ No _____, type _____
Smoke control: Yes _____ No _____, type _____
Adequate exit routes: Yes _____ No _____ Dead ends: Yes _____ No _____
Maximum exit access travel distance _____ Elevator controls: Yes _____ No _____
Means of egress emergency lighting: Yes _____ No _____ Mixed occupancies: Yes _____ No _____

Safety parameters	Fire safety (FS)	Means of egress (ME)	General safety (GS)
3410.6.1 Building height			
3410.6.2 Building area			
3410.6.3 Compartmentation			
3410.6.4 Tenant and dwelling unit separations			
3410.6.5 Corridor walls			
3410.6.6 Vertical openings			
3410.6.7 HVAC systems			
3410.6.8 Automatic fire detection			
3410.6.9 Fire alarm system			
3410.6.10 Smoke control	* * * *		
3410.6.11 Means of egress	* * * *		
3410.12 Dead ends	* * * *		
3410.13 Max. exit access travel distance	* * * *		
3410.6.14 Elevator control			
3410.6.15 Means of egress emergency lighting	* * * *		
3410.6.16 Mixed occupancies		* * * *	
3410.6.17 Automatic sprinklers		÷ 2 =	
3410.6.18 Incidental use area protection			
Building score — total value			

* * * * No applicable value to be inserted.

BUILDING SAFETY EVALUATION SCORE *(Table 3410.9)*

Formula	Table 3410.7		Table 3410.8		Score	Pass	Fail
FS–MFS ≥ 0	_____ (FS)	—	_____ (MFS)	=	_____	_____	_____
ME–MME ≥ 0	_____ (ME)	—	_____ (MME)	=	_____	_____	_____
GS–MGS ≥ 0	_____ (GS)	—	_____ (MGS)	=	_____	_____	_____

FS = Fire Safety
ME = Means of Egress
GS = General Safety
MFS = Mandatory Fire Safety
MME = Mandatory Means of Egress
MGS = Mandatory General Safety

APPENDICES A - J

_____ Appendices adopted *(101.2.1)* _____ Compliance verified

Certificate of Design Application

From Designer: Day Matero studio

Date: December 10, 2009

Job Name: Bowl Portland

Address of Construction: 58 Alder St.

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year IBC-2003 Use Group Classification (s) Assembly A-2/A-3

Type of Construction IIIB

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC Yes

Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) _____

Supervisory alarm System? Yes Geotechnical/Soils report required? (See Section 1802.2) NO

Structural Design Calculations – Refer to Structural Drawings and SO

_____ Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown

Wind loads (1603.1.4, 1609)

_____ Design option utilized (1609.1.1, 1609.6)

_____ Basic wind speed (1809.3)

_____ Building category and wind importance Factor, I_w table 1604.5, 1609.5)

_____ Wind exposure category (1609.4)

_____ Internal pressure coefficient (ASCE 7)

_____ Component and cladding pressures (1609.1.1, 1609.6.2.2)

_____ Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

_____ Design option utilized (1614.1)

_____ Seismic use group ("Category")

_____ Spectral response coefficients, SDs & SD1 (1615.1)

_____ Site class (1615.1.5)

_____ Live load reduction

_____ Roof *live* loads (1603.1.2, 1607.11)

_____ Roof snow loads (1603.7.3, 1608)

_____ Ground snow load, P_g (1608.2)

_____ If P_g > 10 psf, flat-roof snow load P_f

_____ If P_g > 10 psf, snow exposure factor, C_e

_____ If P_g > 10 psf, snow load importance factor, I_s

_____ Roof thermal factor, C_t (1608.4)

_____ Sloped roof snowload, P_s (1608.4)

_____ Seismic design category (1616.3)

_____ Basic seismic force resisting system (1617.6.2)

_____ Response modification coefficient, R_I and deflection amplification factor C_d (1617.6.2)

_____ Analysis procedure (1616.6, 1617.5)

_____ Design base shear (1617.4, 16175.5.1)

Flood loads (1803.1.6, 1612)

_____ Flood Hazard area (1612.3)

_____ Elevation of structure

Other loads

_____ Concentrated loads (1607.4)

_____ Partition loads (1607.5)

_____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404

Accessibility Building Code Certificate

Designer: Day Matero studio

Address of Project: 58 Alder St. Portland, ME

Nature of Project: Interior renovations and exterior improvements for a 12 lane 10 pin bowling center

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.

(SEAL)

LICENSED ARCHITECT
DAVID S. MATERO No. 2705
STATE OF MAINE

Signature:

Title: Principal

Firm: Day Matero studio

Address: 100 Front St. Top Floor
Bath, ME 04530

Phone: 207-671-6820

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

Certificate of Design

Date: December 10, 2009

From: Day Matero studio

These plans and / or specifications covering construction work on:

Bowl Portland, 58 Alder Street

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the ***2003 International Building Code*** and local amendments.

(SEAL)

REGISTERED ARCHITECT
DAVID S. MATERO
No. 2705
STATE OF MAINE

Signature:

Title: Principal

Firm: Day Mater studio

Address: 100 Front Steet Top Floor
Bath, ME 04530

Phone: 207- 671- 6820

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

DayMatero

100 Front Street
Top Floor
Bath, Maine US 04530
207.671.6819
daymatero.com

December 10, 2009

Ms. Jeanie Bourke
Code Enforcement Officer
City of Portland, Maine
389 Congress Street
Portland, ME 04101

Re: Bowl Portland – 58 Alder Street
General Building Permit Application, Accessibility Building Code Certificate, Certificate of Design

Dear Jeanie,

Please find the enclosed applications for the Bowl Portland interior fit-out and exterior improvements at 58 Alder Street in Portland. Also included are one complete full size set of drawings and one CD-rom of pdf files. We met to review this project some time ago, and along with comments from the State Fire Marshal's office and the City of Portland Fire Department, the drawings have been revised based on those meetings.

This set is also being reviewed by the State Fire Marshal's Office, any comments they have will be forwarded to you for your information.

Enclosed applications (and check in the amount of $5,420) include the General Building Permit Application, Certificate of Design, and Accessibility Building Code Certificate.

Thank you for your help in the review of this project.

Sincerely,

David Matero, AIA, LEED AP

Cc: Charlie Mitchell, Justin Alfond, Dale Akeley

DayMatero

100 Front Street
Top Floor
Bath, Maine US 04530
207.671.6819
daymatero.com

TRANSMITTAL

To:	**Jeanie Bourke**	**From:**	**David Matero** david@daymatero.com 207.671.6820
Address:	Code Enforcement Officer City of Portland 389 Congress St. Portland, ME 04101	**Date:**	December 10, 2009
Subject:	Bowl Portland	**Job #:**	09.017

Copies	Date	Number	Description
1	12.07.09	-	Full size set of Issue drawings
1	12.07.09	-	CD rom of drawings – pdf files
1	12.10.09	-	Application and payment

Comments:

Application and payment under separate cover

Copy to:

Signed: David Matero

From: "David Matero" <david@daymatero.com>
To: "'Tammy Munson'" <TMM@portlandmaine.gov>
Date: 12/30/2009 4:13:37 PM
Subject: FW: 58 Alder Street, Bowl Portland

Tammy,

Below is Jeanie's response to the summary of our meeting where we discussed the single means of egress from the second floor.

We referenced section 1014, table 1014.1, spaces with one means of egress where the second floor has 9 occupants and type A buildings have a maximum occupant load of 50 before 2 are required. The stairs rated one hour. I think the provision in table 1018.2 allowing one exit if 1 story and less than 50 occupants might be able to be used, too. Another option is to consider this a mezzanine (as the State Fire Marshal is) level.

The State Fire Marshal's office considers the second floor a mezzanine because of its accessory use and because the public is not allowed. I am attaching my summary of that meeting for your information.

David

David S. Matero, AIA, LEED AP

DayMatero studio

100 Front Street

Top Floor

Bath, ME 04530

david@daymatero.com

http://www.daymatero.com/

207.671.6820

From: David Matero [mailto:david@daymatero.com]
Sent: Friday, September 25, 2009 12:57 PM
To: 'Jeanie Bourke'
Subject: RE: 58 Alder Street, Bowl Portland

Thank you, Jeanie. I had a good meeting with the State Fire Marshal's office today and will forward a summary of that meeting to you later today.

David

David S. Matero, AIA, LEED AP

DayMatero studio

100 Front Street

Top Floor

Bath, ME 04530

david@daymatero.com

http://www.daymatero.com/

207.671.6820

From: Jeanie Bourke [mailto:JMB@portlandmaine.gov]
Sent: Thursday, September 24, 2009 2:26 PM
To: david@daymatero.com; jalfond@gmail.com; votemitchell@gmail.com; eprojec1@maine.rr.com
Subject: Re: 58 Alder Street, Bowl Portland

Thank you David,

I agree with the summary of our meeting, please let me know if any issue arises from your future meetings so that I may review this per the IBC 2003.

Also, I was looking at the use classification and think this may have a dual use since it really will be a restaurant with dance/bowling alley. Maybe it should be A-2/A-3. I don't believe this will affect any of the code discussions thus far, but it will more clearly describe the activities involved.

Keep me informed....

Thanks

Jeanie

Jeanie Bourke
Code Enforcement Officer/Plan Reviewer

City of Portland
Planning & Urban Development Dept./ Inspections Division
389 Congress St. Rm 315
Portland, ME 04101
jmb@portlandmaine.gov
(207)874-8715

>>> "David Matero" <david@daymatero.com> 09/24 11:44 AM >>>

Jeanie,

Attached is a summary of our meeting yesterday. Thank you for your help in the review of this project.

Sincerely,

David Matero

David S. Matero, AIA, LEED AP

DayMatero studio

100 Front Street

Top Floor

Bath, ME 04530

david@daymatero.com

http://www.daymatero.com/

207.671.6820

DayMatero

100 Front Street
Top Floor
Bath, Maine US 04530
207.671.6819
daymatero.com

September 14, 2009

Ms. Jeanie Bourke
Code Enforcement Officer
City of Portland, Maine
389 Congress Street
Third Floor
Portland, ME 04101

Re: Bowl Portland
58 Alder Street

Dear Jeanie,

Thank you for meeting with me yesterday to review the Bowl Portland project at 58 Alder Street. The following summarizes our discussion regarding the project and the attached drawing is included for your information:

- The building, within a B-7 zone, is considered a construction type IIIB and an occupancy classification type A-3

- For purposes of reviewing for the Maine State Internal Plumbing Code, the project will be considered a Restaurant, Pub, Lounge. A total occupancy of 467 persons, 3 men's water closets and 2 urinals would be required. 4 Female water closets are required, but the number must be at least equal to men's fixtures, so 5 are required. 3 Lavatories each are required. (Please note that the attached floor plan will be revised per these requirements)

- Type IIIB buildings must have 2-hour rated perimeter bearing walls. The existing building has 3 layers of brick, a total of 12" thick, and meets the required 2-hour rating.

- The building will be fully sprinklered.

- DayMatero studio (DMS) will meet with the Captain Keith Gaurtreau, Portland Fire Prevention Officer
- DMS will meet with the State Fire Marshal's office. (A meeting has been schedule for Friday September 25).
- Travel distances and remoteness distances were discussed and look acceptable.
- The occupancy load was reviewed and looks acceptable.
- The single egress from the second floor was discussed and looks acceptable.
- The kitchen and bar will be designed and detailed by a food service consultant.

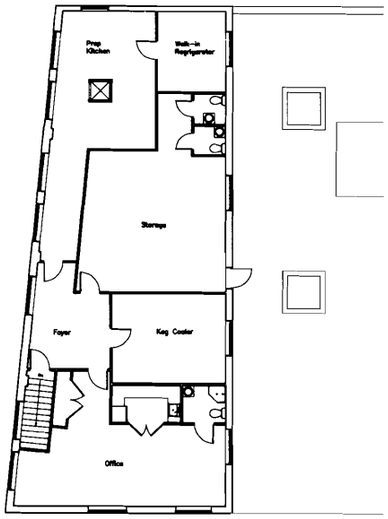
Thank you for your help in the review of this project. Please feel free to contact me if you have any questions.

Sincerely,

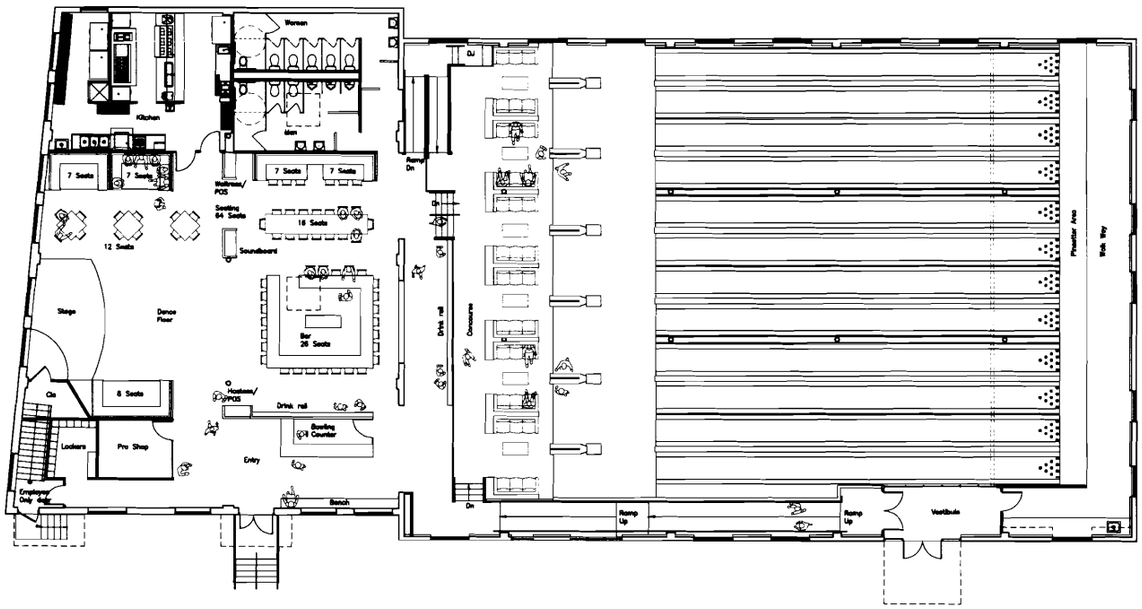
David Matero, AIA, LEED AP
207.671.6820

Cc: Justin Alfond, Charlie Mitchell, Dale Akeley

Encl: Drawing



2 Second Floor Plan
Scale: 1/8" = 1'-0"



1 First Floor Plan
Scale: 1/8" = 1'-0"

Program of Spaces (1st Flr)	
Bowling lanes, approach, and walkway	6,530 sf
Concourse	1,200 sf
Bowling alley circulation	1,000 sf
Kitchen	800 sf
Seating and dance floor	1,275 sf (86 seats)
Stage	200 sf
Bar	300 sf
Bowling Counter	80 sf
Stairs	100 sf
Entry	375 sf
Toilets	500 sf
Lockers	65 sf
Total Net SF	12,225 sf
Gross SF	13,720 sf

Program of Spaces (2nd Flr)	
Office	580 sf
Storage	530 sf
Prep Kitchen	435 sf
Walk-in Ref	135 sf
Keg Cooler	250 sf
Toilets	50 sf
Total Net SF	1,980 sf
Gross SF	2,525 sf

Plan N

DayMatero
Architecture Lighting Design
100 Front Street
Top Floor
Bath Maine US 04530
207.671.6819
info@daymatero.com

Consultants
Casco Bay Engineering
Structural Engineer
Casco Bay Engineering
Civil Engineer
TJM Consulting
Food Service

Revisions

Bowl Portland
58 Alder Street Portland, Maine

Job Number: 09.017
Date: 14.Sep.09
Scale: 1/8" = 1'-0"

Drawing Title:
Proposed Floor Plans

A.1
Design Meeting

DayMatero

100 Front Street
Top Floor
Bath, Maine US 04530
207.671.6819
daymatero.com

September 25, 2009

Mr. Ronald Peaslee
Office of the State Fire Marshal
500 Civic Center Drive
Augusta, Maine 04330

Re: Bowl Portland
58 Alder Street

Dear Ronald,

Thank you for meeting with me today to review the Bowl Portland project at 58 Alder Street. The following summarizes our discussion regarding the project and the attached drawing is included for your information:

- The building is considered a construction type III (200) ordinary hazard.
- The building will be fully sprinklered.
- The common path of travel was discussed in detail. New assembly occupancies may only travel 20' on a common path before separate distinct paths are available. The open plan concept is helpful, and the layout of exit signage will be very important so that multiple paths are identified from the bowling center.
- The door to the second floor exit stairway is not necessary as a first floor egress.
- The occupancy load was reviewed and looks acceptable.

- The single egress from the second floor was discussed and looks acceptable only if the second floor remains as designed. The second floor may not be used for any public uses unless a second means of egress is created. The second floor is considered a mezzanine and the total occupant load may not be more than 10 (it is currently designed for 9).

- The ramp from the ADA entrance must be enlarged to account for the occupant load. When enlarged, it will create the need for a center railing on the ramp.

- DMS will contact Eric Ellis at the State Fire Marshal's Office to review whether the space under the bowling can be protected and/or sprinklered.

- Handrail details of ADA stairs were discussed.

Thank you for your help in the review of this project. Please feel free to contact me if you have any questions.

Sincerely,

David Matero, AIA, LEED AP
207.671.6820

Cc: Justin Alfond, Charlie Mitchell, Dale Akeley

Encl: Drawing

Second Floor Occupant Load

Second Floor	IBC 2003 (Table 1004.1.2)		Life Safety 2003 (Table 7.3.1.2)	
Kitchen	444 sf @ 200 gross sf	2 Occupants	444 sf @ 100 sf	4 Occupants
Storage	542 sf @ 300 gross sf	2 Occupants	542 sf @ 300 sf	2 Occupants
Office (Business Area)	473 sf @ 100 gross sf	5 Occupants	473 sf @ 100 gross sf	5 Occupants
Total Occupant Load First Floor		9 Occupants		9 Occupants

SECOND FLOOR EXIT

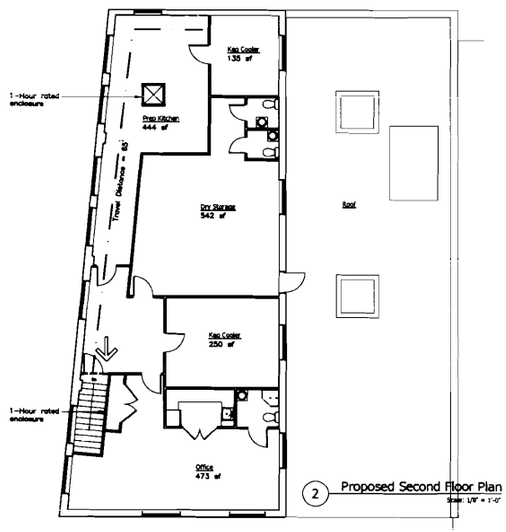
IBC	Stair: Egress Second to grade 48" Wide / .2" = 240 Egress Allowable 9 Proposed – OK	NFPA 101 Stair: Egress First to grade 48" Wide / .3" = 180 Egress Allowable 9 Proposed – OK
IBC	Door: Egress 34" Opening / .15" = 227 Egress Allowable 9 Proposed – OK	NFPA 101 Door: Egress 34" Opening / .2" = 170 Egress Allowable 9 Proposed – OK

First Floor Occupant Load

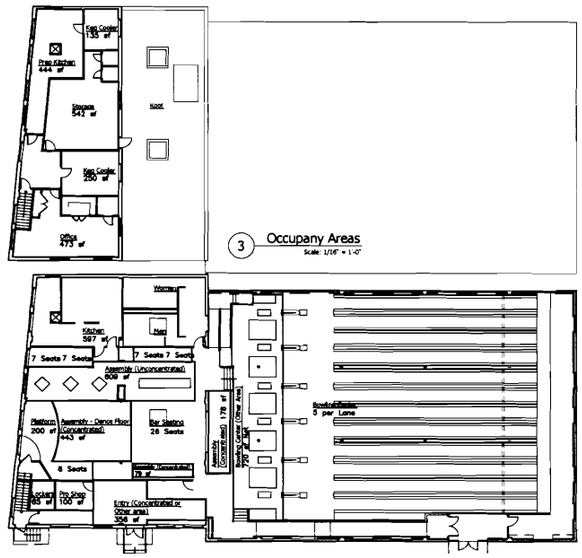
First Floor	IBC 2003 (Table 1004.1.2)		Life Safety 2003 (Table 7.3.1.2)	
Bowling Center	12 Lanes @ 5 per lane = 720 sf @ 7 sf net	163 Occupants	12 Lanes @ 5 per lane = 720 sf @ 7 sf net	163 Occupants
Assembly Space – Dance Floor (Concentrated)	443 sf @ 5 sf	88 Occupants	443 sf @ 7 sf net	63 Occupants
Fixed Booth Seating	36 Seats	36 Occupants	36 Seats	36 Occupants
Assembly Space – Tables/Chairs (Unconcentrated)	528 sf @ 15 sf net	35 Occupants	528 sf @ 15 sf net	35 Occupants
Assembly Space – Standing (Concentrated)	257 sf @ 5 sf	51 Occupants	127 sf @ 7 sf	37 Occupants
Bar Seating (Actual seats)		26 Occupants		26 Occupants
Kitchen	597 sf @ 200 gross sf	3 Occupants	597 sf @ 100 sf	6 Occupants
Lockers	65 sf @ 50 gross sf	1 Occupant		
Pro Shop	100 sf @ 30 gross	3 Occupants	100 sf @ 30 sf	3 Occupants
Platform	200 sf @ 15 sf net	13 Occupants	200 sf @ 15 sf	13 Occupants
Entry (Concentrated or Bowling Center Other Area)	358 sf @ 7 sf	51 Occupants	385 sf @ 7 sf	51 Occupants
Total Occupant Load First Floor		471 Occupants		430 Occupants

Minimum Plumbing Fixtures (Restaurants, Pubs, Lounges)

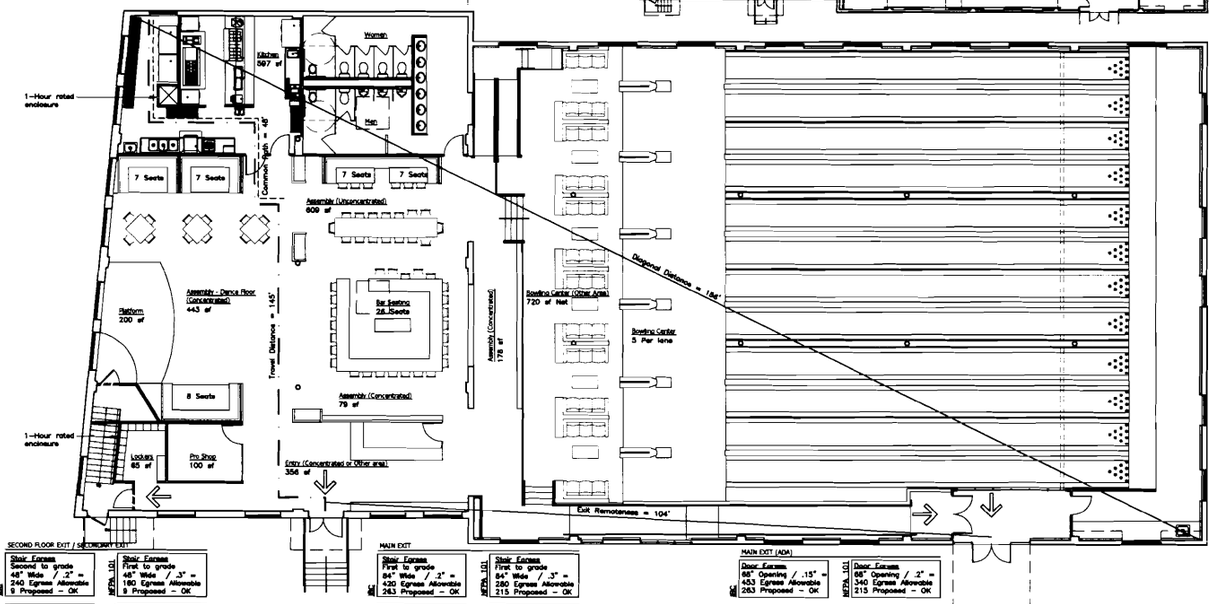
	Men		Female
Water Closets	238 Occ = 3 WC	238 Occ = 2 Urinals	238 Occ = 4 WC (5 to equal Men)
Lavatories	238 Occ = 3 Lava		238 Occ = 3 Lava



2 Proposed Second Floor Plan
Scale: 1/8" = 1'-0"



3 Occupany Areas
Scale: 1/16" = 1'-0"



SECOND FLOOR EXIT / SECONDARY EXIT

IBC	Stair: Egress Second to grade 48" Wide / .2" = 240 Egress Allowable 9 Proposed – OK	NFPA 101 Stair: Egress First to grade 48" Wide / .3" = 180 Egress Allowable 9 Proposed – OK
IBC	Door: Egress 34" Opening / .15" = 227 Egress Allowable 9 Proposed – OK	NFPA 101 Door: Egress 34" Opening / .2" = 170 Egress Allowable 9 Proposed – OK

MAIN EXIT

IBC	Stair: Egress First to grade 84" Wide / .2" = 420 Egress Allowable 263 Proposed – OK	NFPA 101 Stair: Egress First to grade 84" Wide / .3" = 280 Egress Allowable 215 Proposed – OK
IBC	Door: Egress 62" Opening / .15" = 413 Egress Allowable 263 Proposed – OK	NFPA 101 Door: Egress 62" Opening / .2" = 310 Egress Allowable 215 Proposed – OK

MAIN EXIT (ADA)

IBC	Door: Egress 68" Opening / .15" = 453 Egress Allowable 263 Proposed – OK	Door: Egress 68" Opening / .2" = 340 Egress Allowable 215 Proposed – OK

1 Proposed First Floor Plan
Scale: 1/8" = 1'-0"

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Architecture Lighting Design
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Top Floor
Bath Maine US 04530
207.671.6819
info@daymatero.com

Consultants
Casco Bay Engineering
Structural Engineer
Casco Bay Engineering
CME Engineer
TJM Consulting
Food Service

Revisions

Bowl Portland
58 Alder Street Portland, Maine

Job Number: 09.017
Date: 14.Sep.09
Scale: 1/8" = 1'-0"

Drawing Title:
Code Review Plan

R.2
Not For Construction

From: "David Matero" <david@daymatero.com>
To: <tmm@portlandmaine.gov>
Date: 12/22/2009 4:20:56 PM
Subject: Bowl Portland - 58 Alder Street

Tammy,

I just spoke with Jeanie Bourke regarding the review of Bowl Portland. She mentioned that you would be reviewing the project as Jeanie is going on vacation until Jan. 6.

For your information, I received comments from the State Fire Marshal's office regarding the package. The comments are as follows:

1. 4' landing required at top of interior stairs (I addressed this in addendum that will be forwarded tomorrow).

2. Handrails required both sides of all stairs (addressed in addendum).

3. Ramp required to stage. I am waiting on a response from the State Fire Marshal's office. We hope to detail a demountable ramp because the stage is strictly for live music and we would prefer to not install a permanent ramp. I will let you know the response.

4. Occupant load of 446 calculated; 2/3 of occupant load shall exit through main entrance requiring that the front steps be widened by 6" (addressed in addendum).

Please call me if you have any questions. I had met previously with Jeanie and reviewed this with her. Since that review the project has changed very little in scope. We open bids the end of December and the owner's lease begins the first of the year so if there is anything I can to do help your review please contact me.

Thank you.

Sincerely,

David Matero

David S. Matero, AIA, LEED AP

DayMatero studio

100 Front Street

Top Floor

Bath, ME 04530

<mailto:david@daymatero.com> david@daymatero.com

<http://www.daymatero.com/> http://www.daymatero.com/

207.671.6820

DayMatero

100 Front Street
Top Floor
Bath, Maine US 04530
207.671.6819
daymatero.com

December 28, 2009

Mr. Ronald Peaslee
State Fire Marshal's Office
500 Civic Center Drive
Augusta, Maine 04330

Re: Bowl Portland – 58 Alder Street, Portland, Maine
Revision to Drawings

Dear Ronald,

I am in receipt of your comments dated December 17, 2009 regarding the Bowl Portland project.

A 4' landing was added at the top of interior stairs and was indicated in Addendum #1. Door #13, top of interior stair, does not swing the direction of egress on Addendum #1. The door swing will be revised to swing in the direction of travel in change order #1 and will be submitted to the eventual general contractor.

Handrails on both sides of stairs have been indicated in Addendum #1.

After reviewing your comments regarding ADA accessibility to the stage, the Owner has decided to omit the platform and steps to the platform. It is too late for an addendum, so this will be addressed in change order #1.

The front steps have been enlarged to 7'-6" wide to accommodate up to 300 occupants. This was addressed in addendum #1.

The front door, in an existing opening, can accommodate a 66" opening. By subtracting the frame and door width, the clear opening is 58" (as you noted by email) and therefore can accommodate a total of 290 occupants.

By removing the stage, we have been able to re-address the occupant load of the first floor as we have indicated the stage area to be dance floor. See the attached sketches indicating a new occupant load analysis. We have re-addressed the assembly and seating spaces so that there is a total occupant load of 433 on the first floor (NFPA). By factoring 2/3 of egress through the front door, the occupant load through the front door must handle 289 occupants, the door opening can handle 290 occupants. The attached sketches will be issued as change order #1 to the eventual general contractor.

Please contact me if you have any questions in the analysis of Bowl Portland.

Thank you for your help in the review of this project.

Sincerely,

David Matero, AIA, LEED AP
207.671.6820

Cc: Tammy Munson, Portland Code Enforcement Officer
Charlie Mitchell
Justin Alfond
Dale Akeley, Project Resources, Inc.

Encl: ASK-04, Occupancy Areas
ASK-05, First Floor Occupant Load

First Floor Occupant Load

First Floor	IBC 2003 (Table 1004.1.2)		Life Safety 2006 (Table 7.3.1.2)	
Bowling Center	12 lanes @ 5 per lane + 775 sf @ 7 sf net	171 Occupants	12 Lanes @ 5 per lane + 775 sf @ 7 sf net	171 Occupants
Assembly Space – Dance Floor (Concentrated)	575 sf @ 5 sf	115 Occupants	575 sf @ 7 sf net	82 Occupants
Fixed Booth Seating	20 Seats	20 Occupants	20 Seats	20 Occupants
Assembly Space – Tables/Chairs (Unconcentrated)	650 sf @ 15 sf net	44 Occupants	650 sf @ 15 sf net	44 Occupants
Assembly Space – Standing (Concentrated)	165 sf @ 5 sf	33 Occupants	165 sf @ 7 sf	24 Occupants
Bar Seating (Actual seats)		28 Occupants		28 Occupants
Kitchen	590 sf @ 200 gross sf	3 Occupants	590 sf @ 100 sf	6 Occupants
Coat Room	50 sf @ 50 gross sf	1 Occupant		
Game Room	80 sf @ 11 gross sf (use Casino)	7 Occupants	80 sf @ 11 sf (use Casino)	7 Occupants
DJ Booth / Soundboard	40 sf	2 Occupants	40 sf	2 Occupants
Entry (Concentrated or Bowling Center Other Area)	340 sf @ 7 sf	49 Occupants	340 sf @ 7 sf	49 Occupants
Total Occupant Load First Floor		473 Occupants		433 Occupants

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Top Floor
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207.671.6819
info@daymatero.com

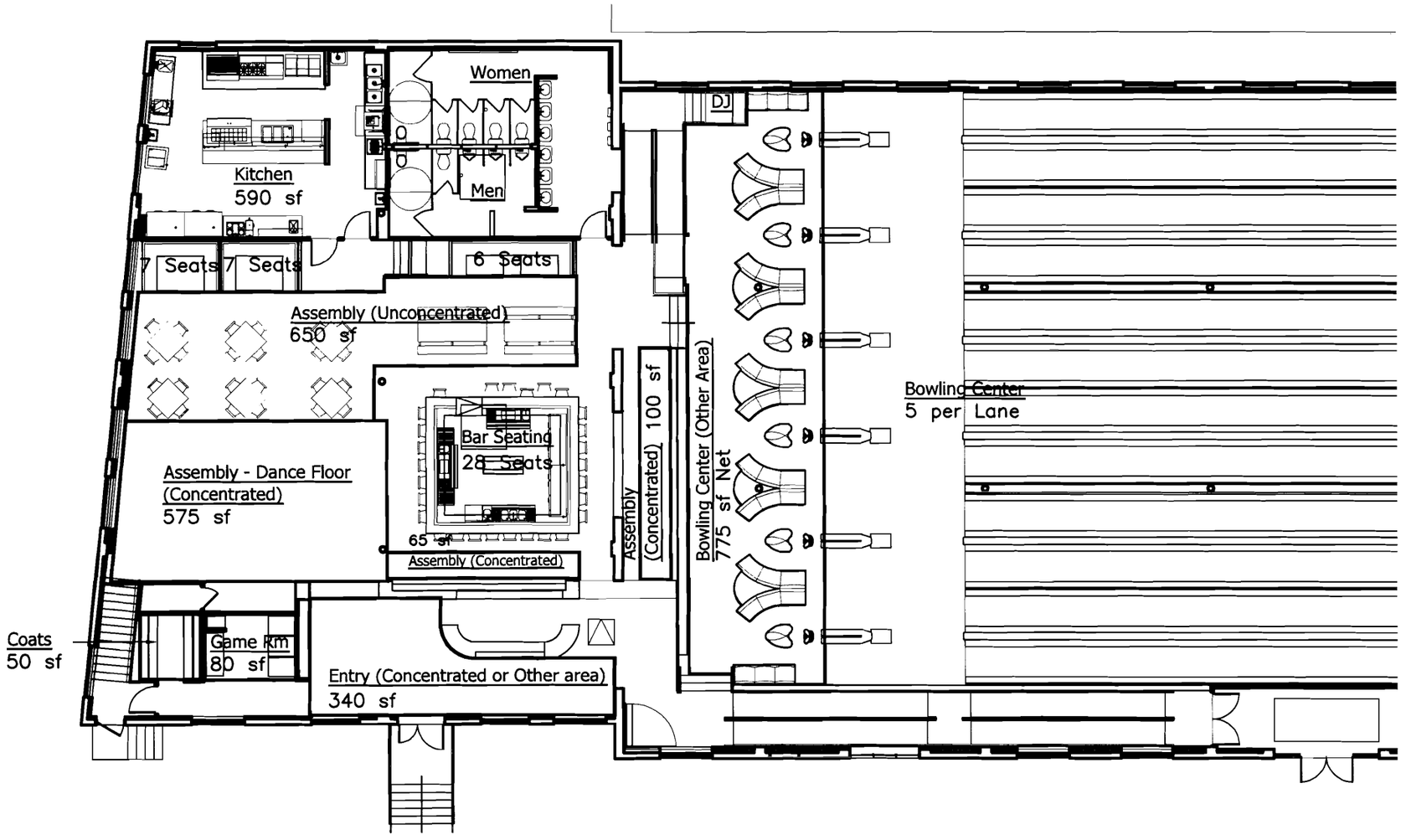
Change Order #1

R.2, First Floor Occupant Load

Scale: NTS
Date: 12.28.09

Bowl Portland
58 Alder Street, Portland, Maine

ASK.05



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Bath Maine US 04530
207.671.6819
info@daymatero.com

Change Order #1

Bowl Portland
58 Alder Street, Portland, Maine

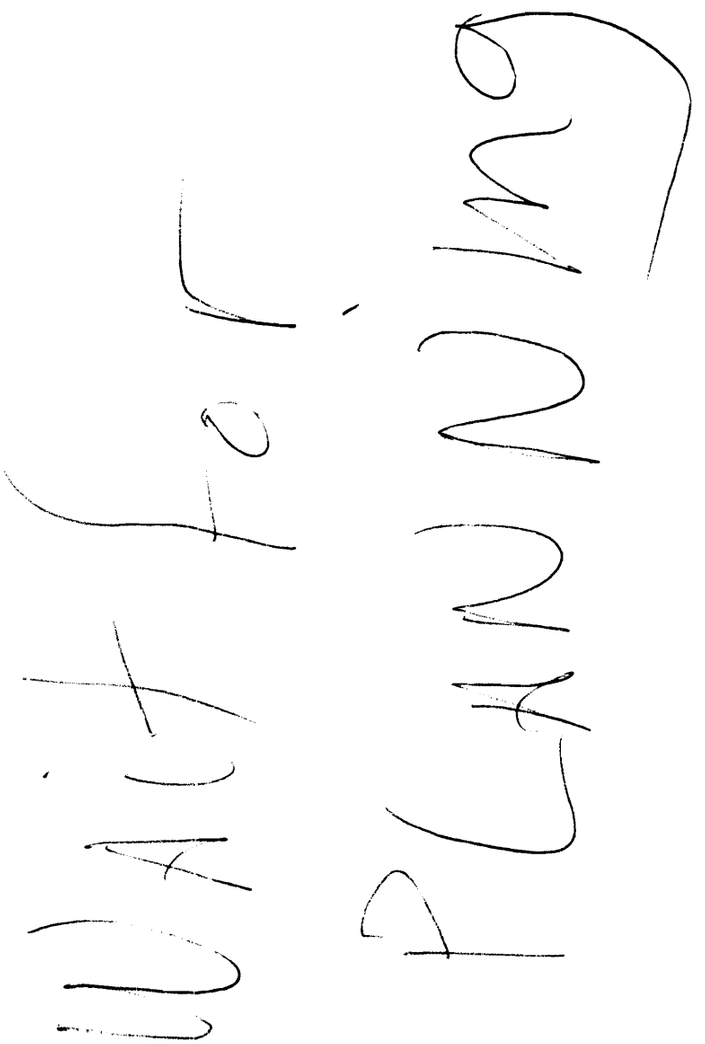
R.2, Occupancy Areas
Scale: 1/16" = 1'-0"
Date: 12.28.09

ASK.04

From: David Matero <david@daymatero.com>
To: Tammy Munson <tmm@portlandmaine.gov>
Date: 12/29/2009 7:59:47 AM
Subject: Fwd: Bowl Portland

Tammy,

...d off on Bowl Portland.



>
> David S. Matero, AIA, LEED AP
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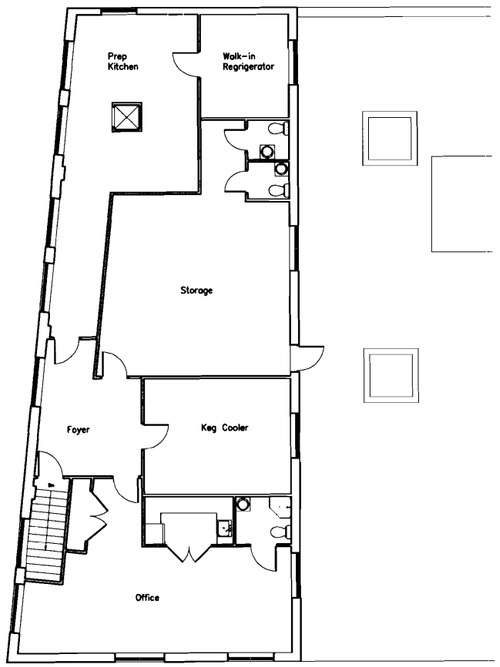
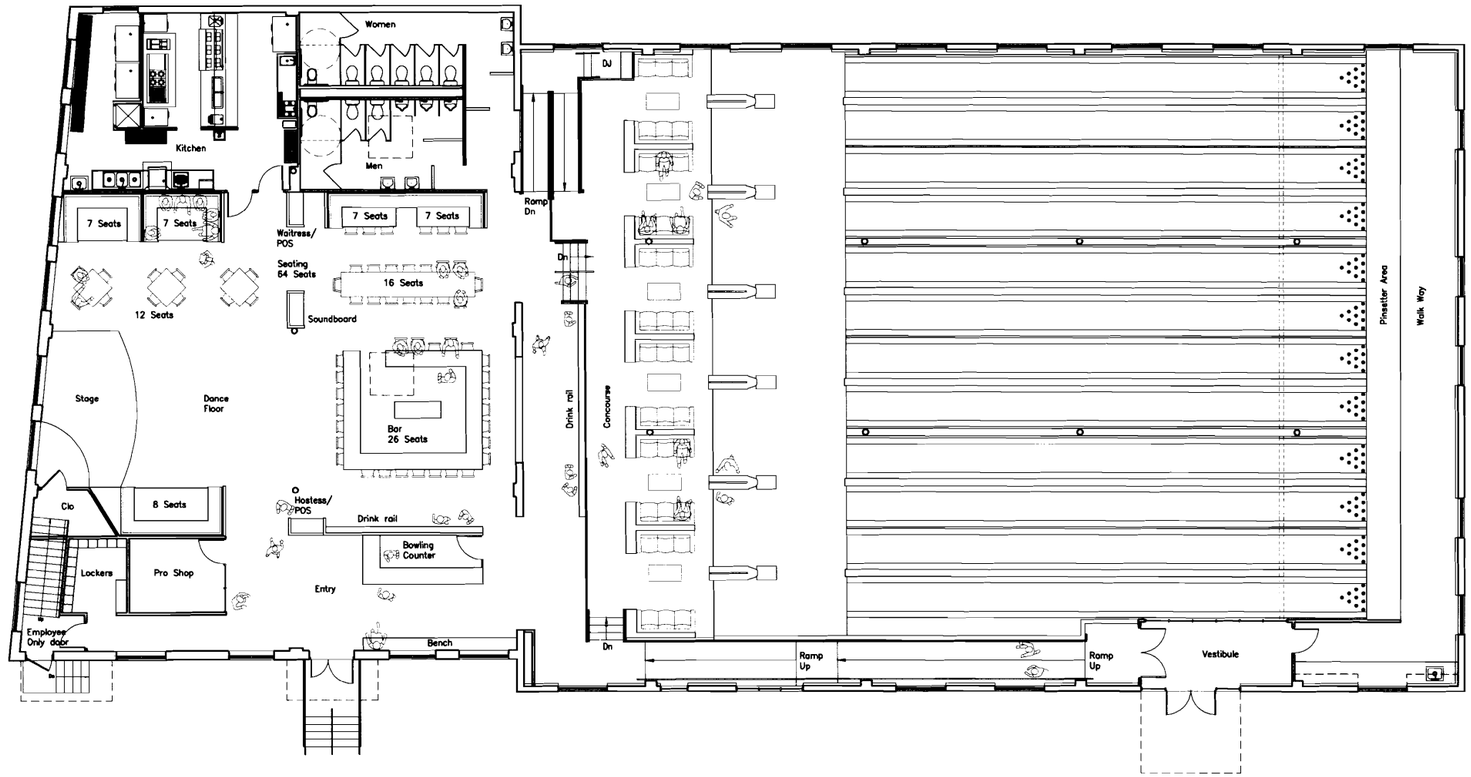


2 Second Floor Plan
Scale: 1/8" = 1'-0"



1 First Floor Plan
Scale: 1/8" = 1'-0"

Program of Spaces (1st Flr)

Bowling lanes, approach, and walkway	6,530 sf
Concourse	1,200 sf
Bowling alley circulation	1,000 sf
Kitchen	600 sf
Seating and dance floor	1,275 sf (66 seats)
Stage	200 sf
Bar	300 sf
Bowling Counter	80 sf
Store	100 sf
Entry	375 sf
Toilets	500 sf
Lockers	65 sf
Total Net SF	12,225 sf
Gross SF	13,720 sf

Program of Spaces (2nd Flr)

Office	580 sf
Storage	530 sf
Prep Kitchen	435 sf
Walk-in Ref	135 sf
Keg Cooler	250 sf
Toilets	50 sf
Total Net SF	1,980 sf
Gross SF	2,525 sf

Plan N

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Revisions

Bowl Portland
58 Alder Street Portland, Maine

Job Number: 09.017
Date: 14.Sep.09
Scale: 1/8" = 1'-0"

Drawing Title:
Proposed Floor Plans

A.1
Design Meeting

Second Floor Occupant Load

Second Floor	IBC 2003 (Table 1004.1.2)		Life Safety 2003 (Table 7.3.1.2)	
Kitchen	444 sf @ 200 gross sf	2 Occupants	444 sf @ 100 sf	4 Occupants
Storage	542 sf @ 300 gross sf	2 Occupants	542 sf @ 300 sf	2 Occupants
Office (Business Area)	473 sf @ 100 gross sf	5 Occupants	473 sf @ 100 gross sf	5 Occupants
Total Occupant Load First Floor		9 Occupants		9 Occupants

SECOND FLOOR EXIT

IBC
Stair Egress
Second to grade
48" Wide / .2" =
240 Egress Allowable
9 Proposed – OK

NFPA 101
Stair Egress
First to grade
48" Wide / .3" =
160 Egress Allowable
9 Proposed – OK

IBC
Door Egress
34" Opening / .15" =
227 Egress Allowable
9 Proposed – OK

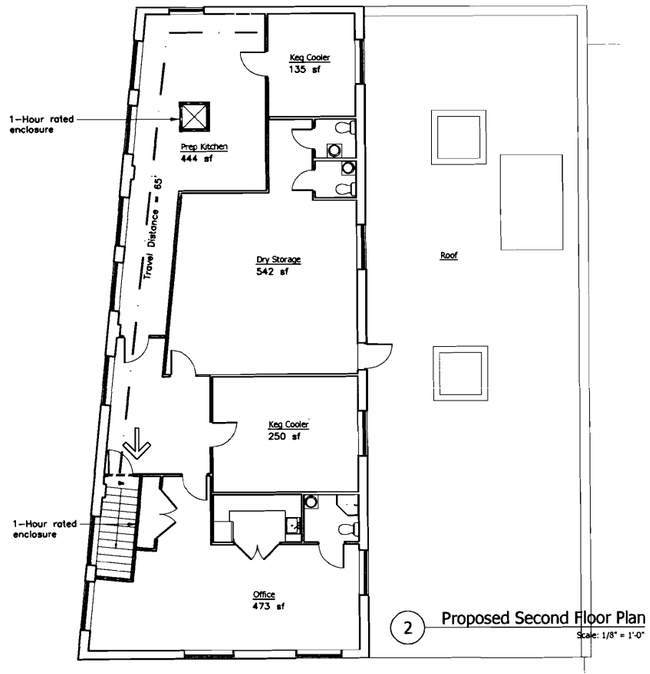
NFPA 101
Door Egress
34" Opening / .2" =
170 Egress Allowable
9 Proposed – OK

First Floor Occupant Load

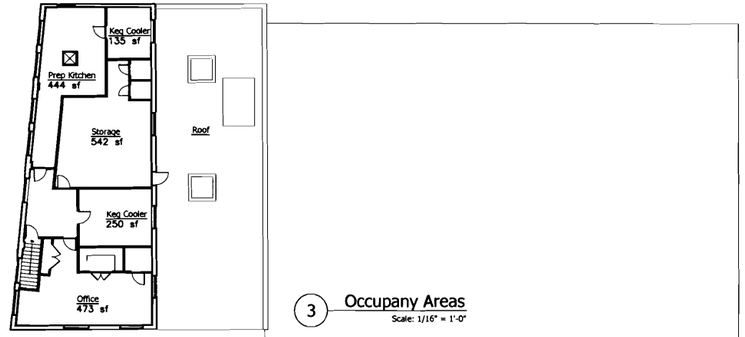
First Floor	IBC 2003 (Table 1004.1.2)		Life Safety 2003 (Table 7.3.1.2)	
Bowling Center	12 lanes @ 5 per lane + 720 sf @ 7 sf net	163 Occupants	12 Lanes @ 5 per lane + 720 sf @ 7 sf net	163 Occupants
Assembly Space – Dance Floor (Concentrated)	443 sf @ 5 sf	89 Occupants	443 sf @ 7 sf net	63 Occupants
Fixed Booth Seating	36 Seats	36 Occupants	36 Seats	36 Occupants
Assembly Space – Tables/Chairs (Unconcentrated)	528 sf @ 15 sf net	35 Occupants	528 sf @ 15 sf net	35 Occupants
Assembly Space – Standing (Concentrated)	257 sf @ 5 sf	51 Occupants	127 sf @ 7 sf	37 Occupants
Bar Seating (Actual seats)		26 Occupants		26 Occupants
Kitchen	597 sf @ 200 gross sf	3 Occupants	597 sf @ 100 sf	6 Occupants
Lockers	65 sf @ 50 gross sf	1 Occupant		
Pro Shop	100 sf @ 30 gross sf	3 Occupants	100 sf @ 30 sf	3 Occupants
Platform	200 sf @ 15 sf net	13 Occupants	200 sf @ 15 sf	13 Occupants
Entry (Concentrated or Bowling Center Other Area)	356 sf @ 7 sf	51 Occupants	365 sf @ 7 sf	51 Occupants
Total Occupant Load First Floor		471 Occupants		430 Occupants

Minimum Plumbing Fixtures (Restaurants, Pubs, Lounges)

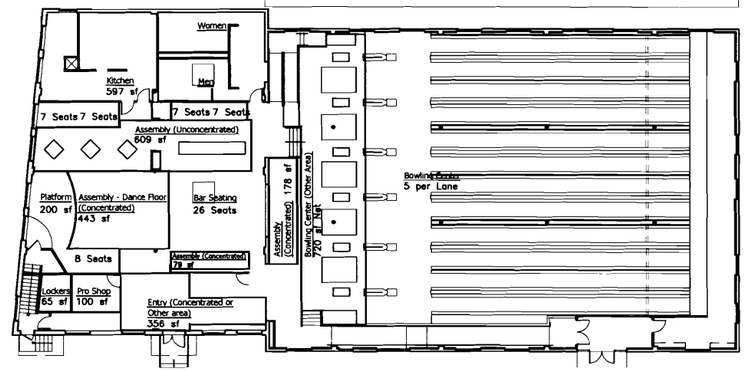
	Men		Female
Water Closets	236 Occ = 3 WC	236 Occ = 2 Urinals	236 Occ = 4 WC (5 to equal Men)
Lavatories	236 Occ = 3 Lavs		236 Occ = 3 Lavs

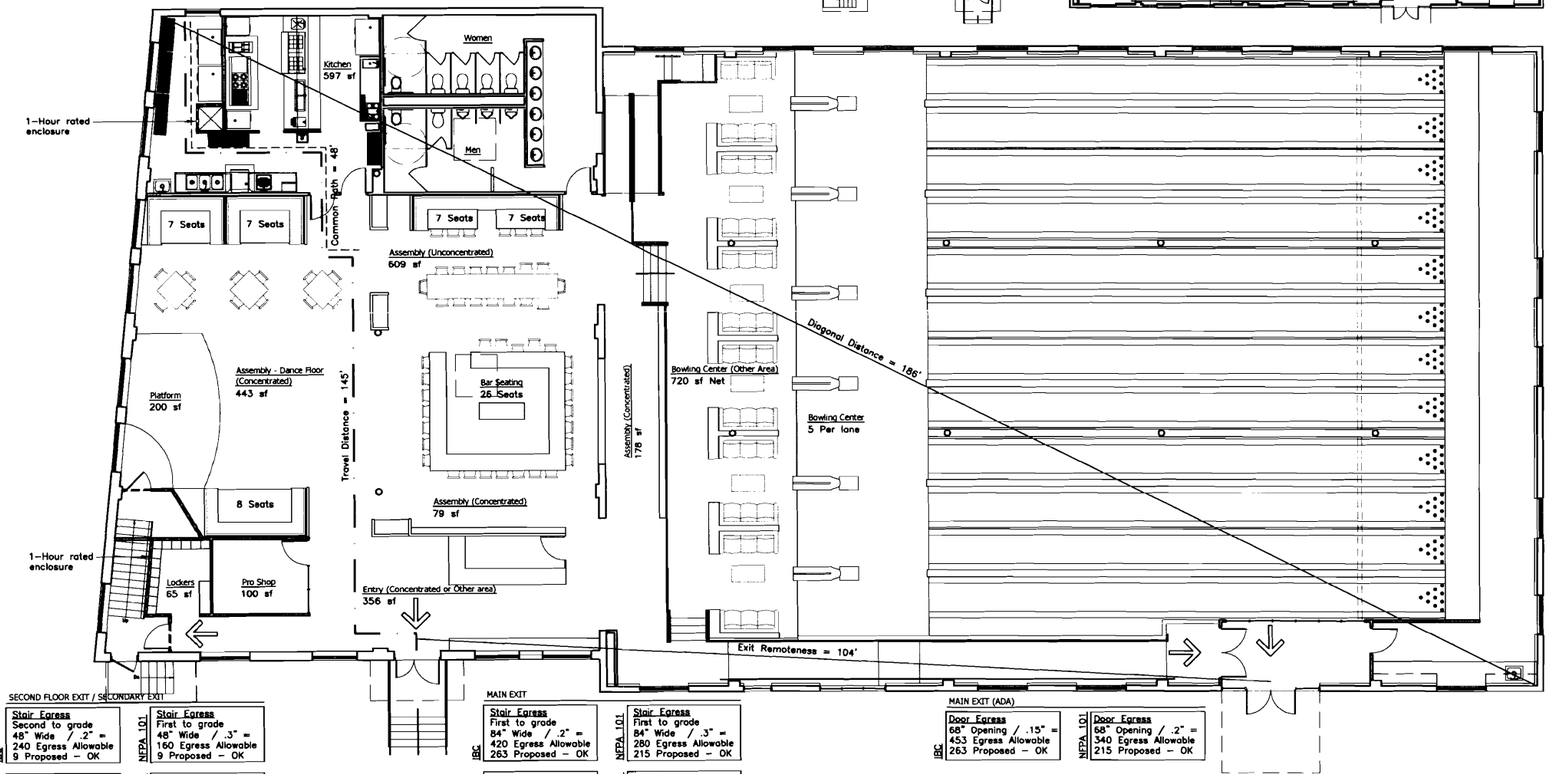


2 Proposed Second Floor Plan
Scale: 1/8" = 1'-0"



3 Occupany Areas
Scale: 1/16" = 1'-0"





1 Proposed First Floor Plan
Scale: 1/8" = 1'-0"

SECOND FLOOR EXIT / SECONDARY EXIT

IBC
Stair Egress
Second to grade
48" Wide / .2" =
240 Egress Allowable
9 Proposed – OK

NFPA 101
Stair Egress
First to grade
48" Wide / .3" =
160 Egress Allowable
9 Proposed – OK

IBC
Door Egress
34" Opening / .15" =
227 Egress Allowable
9 Proposed – OK

NFPA 101
Door Egress
34" Opening / .2" =
170 Egress Allowable
9 Proposed – OK

MAIN EXIT

IBC
Stair Egress
First to grade
84" Wide / .2" =
420 Egress Allowable
263 Proposed – OK

NFPA 101
Stair Egress
First to grade
84" Wide / .3" =
280 Egress Allowable
215 Proposed – OK

IBC
Door Egress
62" Opening / .15" =
413 Egress Allowable
263 Proposed – OK

NFPA 101
Door Egress
62" Opening / .2" =
310 Egress Allowable
215 Proposed – OK

MAIN EXIT (ADA)

IBC
Door Egress
68" Opening / .15" =
453 Egress Allowable
263 Proposed – OK

NFPA 101
Door Egress
68" Opening / .2" =
340 Egress Allowable
215 Proposed – OK

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